





1000777

 **Bhooma
Sundar/R5/USEPA/US**
08/03/2006 07:47 AM

To Jacqueline Miller/R5/USEPA/US@EPA
cc
bcc
Subject Re: Techalloy - sod farm wells 

Thanks Jacqueline. Let's see what Techalloy will be able to provide us on Monday regarding the private wells.

Bhooma
Jacqueline Miller/R5/USEPA/US



**Jacqueline
Miller/R5/USEPA/US**
08/02/2006 11:05 AM

To Bhooma Sundar/R5/USEPA/US@EPA
cc

Subject Techalloy - sod farm wells

Bhooma, I just spoke to Dan Guif (e-mail address deguif@co.mchenry.il.us).

He says that the 2 sod farm wells are 70 feet deep, and are screened between 40 feet and 70 feet. They are gravel-packed wells that he thinks were drilled in a sandy gravel formation (because the well driller has disappeared, the county does not have his well logs).

He'll look into the screening depths of those private wells and get back to us.

Jacqueline Miller
312/886-7167



Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1490
847-918-4000 • Fax 847-918-4055

RECEIVED
NOV 18 1996

14 November 1996

DIVISION FRONT OFFICE
Waste, Pesticides & Toxics Division
U.S. EPA - REGION 5

Mr. William Buller
Project Coordinator
Enforcement and Compliance Insurance Branch
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, IL 60604-3590

Work Order No.: 01989-028-001

Re: RCRA Facility Investigation
Administrative Order on Consent
ILD/005 178 975

P.3.1

Dear Mr. Buller:

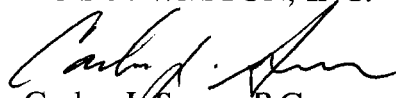
Roy F. Weston, Inc. (WESTON®) on behalf of the Techalloy Company, Inc. is requesting an extension pertaining to the submittal of the information relevant to future land use at the Techalloy property in Union, Illinois. The request for this information was documented in a letter from U.S. EPA dated 29 October 1996 and received by WESTON on 31 October 1996.

In order to complete the collection of required information an additional 15 days is required. This extension would change the submittal date to 30 November 1996. This additional time is required so that appropriate and legal deed restrictions or covenants can be incorporated into the present deed. The agency letter from 29 October 1996 indicated that if additional time is required that Techalloy was to provide this request in writing. This letter satisfies that requirement, as well as our telephone conversation from today where you agreed verbally to an extension to 30 November 1996.

If you have any questions please do not hesitate to contact me at (847) 918-4002 or Henry Lopes from Techalloy at (201) 529-0900.

Very truly yours,

ROY F. WESTON, INC.


Carlos J. Serna, P.G.
Senior Project Manager

CJS:sk

cc: Jack Thorsen, WESTON
Henry Lopes, Techalloy
Kevin Lesko, IEPA
John Coehnen, A.T. Kearney



1007 29 1996

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

DRE-8J

Mr. Henry Lopes
Techalloy Company, Inc.
370 Franklin Turnpike
Mahwah, New Jersey 07430

Re: RCRA Facility Investigation
Administration Order on Consent
Docket No. V-W-07-93
ILD 005 178 975

Dear Mr. Lopes:

The United States Environmental Protection Agency (U.S. EPA) hereby approves the document "RCRA Facility Investigation Report, Techalloy Company, Inc., Union, Illinois" (as revised October 7, 1996) submitted in accordance with the above referenced Administrative Order on Consent, with the following modifications (items 1-4):

1. Section 4.3.2, first sentence of first Paragraph - The phrase "of September 1996" does not fit with time frame discussed and is deleted.
2. Section 4.3.2. paragraph under Total Metals - Last sentence is deleted and the following sentence added "Maximum Concentration Limits or health advisory limits specified by U.S. EPA for the metals detected are .05 mg/l for arsenic; 2 mg/l for barium; 13 mg/l for copper; 3 mg/l for zinc; and .015 mg/l for lead".
3. Section 4.3.2, paragraph under Soluble Metals - Last sentence is deleted and the following sentence added "Barium, lead, and zinc were not detected in MW-HBR, the off-site well.
4. Section 6.3, page 6-24, bullet 8 - Sentence is deleted and replaced with the following sentence "Data obtained from on-site and off-site sampling points indicate that DNAPLS and LNAPLS, though possibly occurring in discrete amounts in the soil profile, do not occur in distinct pools suggesting migration separate to groundwater migration".

U.S. EPA has received your Corrective Measures Study (CMS) Workplan dated September, 1996 which was submitted in accordance with the above referenced AOC. The projection for future land

use of the site (residential or industrial) is a critical matter in implementing a CMS. Additional information is needed for U.S. EPA TO make a determination on the future land use projection. Within fifteen days of receipt of this letter, Techalloy shall submit to U.S. EPA additional information pertaining to future land use which incorporates all applicable and available information as noted in OSWER Directive No. 9355.7-04. A copy of this document is enclosed. Upon receipt of the additional land use information U.S. EPA will make a determination as to the appropriate land use projection and provide comments on your draft CMS work plan.

If additional time is needed to develop the land use information, Techalloy shall request in writing the need for additional time and an explanation for such need.

If you have any questions, please call me at (312) 886-4568.

Sincerely,

William Buller

William Buller, Project Coordinator
Enforcement and Compliance Assurance Branch
Waste Pesticides and Toxics Division
MI/WI Section

cc: Carlos Serna, Weston
Kevin Lesko, IEPA
John Koehnen, A.T. Kearney

bcc: J. Kline, ORC

ENFORCEMENT AND COMPLIANCE ASSURANCE BRANCH

SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY
AUTHOR/ TYPIST	MINN/OHIO SECTION CHIEF	MICHIGAN/ WISCONSIN SECTION CHIEF	ILLINOIS/ INDIANA SECTION CHIEF	ECAB BRANCH CHIEF	WPTD DIVISION DIRECTOR
<i>WP</i> <i>10/25/96</i>					

100T 29 1996

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

DRE-8J

Mr. Henry Lopes
Techalloy Company, Inc.
370 Franklin Turnpike
Mahwah, New Jersey 07430

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Administration Order on Consent
Docket No. V-W-07-93
ILD 005 178 975

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Sincerely,

William Buller

William Buller, Project Coordinator
Enforcement and Compliance Assurance Branch
Waste Pesticides and Toxics Division
MI/WI Section

cc: Carlos Serna, Weston
Kevin Lesko, IEPA
John Koehnen, A.T. Kearney

bcc: J. Kline, ORC

ENFORCEMENT AND COMPLIANCE ASSURANCE BRANCH

SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY
AUTHOR/ TYPIST	MINN/OHIO SECTION CHIEF	MICHIGAN/ WISCONSIN SECTION CHIEF	ILLINOIS/ INDIANA SECTION CHIEF	ECAB BRANCH CHIEF	WPTD DIVISION DIRECTOR
<i>WB</i> <i>10/25/96</i>					

P 140 675 258

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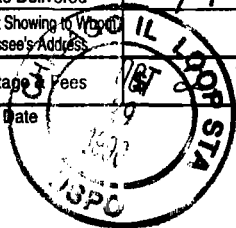
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DRE-85

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B. Bello

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B. Buller

U.S. EPA
77 W. JACKSON BLVD.
DRE-8J
WPTD
CHICAGO, IL 60604



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Mr. Henry Lopes
 Techalloy Company, Inc.
 370 Franklin Turnpike
 Mahwah, New Jersey 07430

4a. Article Number

P-140-675-258

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Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450
847-918-4000 • Fax 847-918-4055

RECEIVED
OCT 10 1996

DIVISION FRONT OFFICE
Waste, Pesticides & Toxics Division
U.S. EPA - REGION 5

Work copy

Mr. William Buller
U.S. EPA, Region V
RCRA Enforcement Branch (HRE-8J)
77 West Jackson Boulevard
Chicago, Illinois 60604

Work Order No. 01989-009-002

Re: Response to EPA's Comments on the RFI Report for the Techalloy
Facility in Union, Illinois

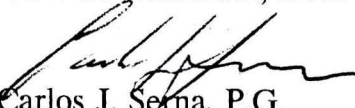
Dear Mr. Buller:

Roy F. Weston, Inc. (WESTON®) is pleased to provide to the United States Environmental Protection Agency (U.S. EPA) with responses to the comments and appropriate changes and/or additions to the RFI Report for the above referenced facility. Attachment I to this letter provides WESTON's response to U.S. EPA's comments and identifies the pages and/or sub-sections where appropriate changes and/or additions were made. All the additions and/or changes in the report have been highlighted in the report.

WESTON is forwarding two copies of the corrected pages and figures for your review. These pages and figures will either replace and/or added to the copy of RFI Report that was submitted to U.S. EPA in June 1996.

If you have any questions or require additional information, please do not hesitate to contact me at (847) 918-4000.

Very truly yours,
ROY F. WESTON, INC.


Carlos J. Serna, P.G.
Senior Project Manager

Attachments

cc: Kevin Lesko, IEPA
Henry Lopes, Techalloy
David Williams, Techalloy
Scott Carr, Techalloy



77

Techealloy

10/7/96 RFI

revision

ATTACHMENT I

General Comments:

Comment 1. The matter of metal concentration in groundwater is not satisfactorily addressed. The revised RFI report does not provide adequate technical justification for the interpretation that the filtered sample analysis defines the concentration level of metals in groundwater. Consequently the existing data does not properly delineate the extent of metal constituents in groundwater. Monitoring wells MW-6, MW-7, MW-9, and MW-HBR shall be resampled. Samples shall be collected so as to minimize turbidity in the samples and both filtered and unfiltered sample shall be analyzed for the metal constituents specified in the QAPP. The additional data shall be incorporated into the report and the text revised accordingly.

check mcl

Response: Monitoring wells MW-6, MW-7, MW-9, and MW-HBR were resampled by WESTON on September 10, 1996. Samples were collected once the well had been adequately purged and the suspended sediments were allowed time to settle within the well. This minimized turbidity and interference in obtaining realistic results. Once this was done samples were analyzed for total and dissolved metals as per QAPP. The additional data has been incorporated in the text as subsection 4.3.2 entitled "Resampling of monitoring wells" (page 4-41). The results indicate that in both the total and soluble results the metals detected were lead, zinc, arsenic, barium and copper. The results between total and soluble were fairly consistent with of course slightly higher concentrations in the total metals sample. Each of these constituents, with the exception of zinc, were slightly above the detection limit. Zinc was detected in wells MW-HBR, MW-6, MW-7 and MW-9 at concentrations that ranged from 0.034 mg/l to 3.1 mg/l. There is not a maximum contaminant level (MCL) for zinc, however the Illinois Environmental Protection Agency (IEPA) sets a nonresidential land use criteria for zinc at 30.66 mg/l. The resampling of these wells indicates that the previous sampling results were the result of significantly turbid samples. It is apparent from the resampling that metals in the groundwater, as either total or soluble, are not a constituent or a media of concern (Page 4-41 and 4-42). Tabulated results are presented in Table 4-45 (Page 4-121 and 4-122).

Comment 2. Though the cross-section depicted in Figure 6-10 does provide a profile of volatile organic constituent (VOC) concentrations and some insight as to DNAPL occurrence at the site, a discussion of the interpretation of this data was not found in the text. The revised report shall provide a thorough interpretative discussion of this data as pertaining to DNAPL occurrence.

✓ **Response:** Sub-section 6.2.5 entitled "DNAPLs and LNAPLs" has been added to the report that provides a thorough interpretative discussion of the data pertaining to DNAPLs and LNAPLs occurrence. (Page 6-21)

Note Lab report - not provided

Specific Comments:

Comment 1. Figures 6-3, 6-4, 6-5, and 6-6 are based on earlier data which is superseded by more recent data. These figures do not properly delineate the plume and shall be deleted.

✓ Response: Figures 6-3, 6-4, 6-5, and 6-6 that present the plumes for 1,1,1-TCA, TCE, PCE and total VOCs following the completion of Phase I and Phase II RFI Study. With additional groundwater investigation January 1996 the plume has been delineated off-site also and is represented by Figures 6-7 and 6-8. Per conversation and agreement with U.S. EPA on September 3, 1996, it was decided not to delete figures 6-3, 6-4, 6-5, and 6-6 but mention the fact these figures have been superseded by figures 6-7 and 6-8. This is mentioned in page 6-15 under subsection 6.2.3. (Page 6-15)

Comment 2. Figure 6-11 - GW8 should be changed to GW6 so as to agree with figure 6-9 which shows the cross-section locations.

✓ Response: Figure 6-11 presents the data for GW8 instead of GW6, therefore figure 6-9 that shows the cross-section B-B' was changed to reflect GW8. (Page 6-18 and Page 6-20).

Comment 3. An additional cross-section extending through sampling points GW6, GW2, and GW5 shall be included in the report.

✓ Response: An additional cross-section C-C' has been added to the report as Figure 6-11A. Consequently Figure 6-9 has been revised accordingly to present the location of cross-section C-C'. (Page 6-20A).

Comment 4. Section 6.2.3 - The groundwater plume, taking into account the entire vertical profile is about 1600 feet in width. Text shall be revised accordingly.

✓ Response: The plume width has been revised to read 1600 feet in Sub-section 6.2.3. (Page 6-15).

Comment 5. Section 6.3, Bullet 7 - This part states that metal constituents is limited to on-site locations. This has not been verified and all of this part shall be deleted. Bullet 8 - Text should be revised based on new groundwater analysis for metals.

✓ Response: Bullet 7 in Section 6.3 has been rewritten following the results of total and soluble metal analysis of September 1996 resampling effort. Text relevant to Bullet 8 has been reworded and included in Bullet 7. Bullet 8 now mentions absence of DNAPLs and LNAPLs during the investigative study. (Page 6-24) *revised/modified*

Comment 6. Page 5-26 - Table 5-14 is referenced; Table 5-15 appears to be the correct reference.

✓ Response: The table number is corrected to read Table 5-15 (Page 5-26).

Note: The table of contents and relevant portion of Section 1 have been revised to reflect these changes.

AUG 22 1996

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

DRE-8J

Mr. Henry Lopes
Techalloy Company, Inc.
370 Franklin Turnpike
Mahwah, New Jersey 07430

Re: RCRA Facility Investigation Report
Administrative Order on Consent
Docket No. V-W-07-93
ILD 005 178 975

Dear Mr. Lopes:

The United States Environmental Protection Agency (U.S. EPA) has reviewed the document "RCRA Facility Investigation-Techalloy Company, Inc., Union, Illinois", as revised June 1996, which was submitted in accordance with Section VI of the Administrative Order on Consent (AOC), Docket No. V-W-007-93. Certain deficiencies in the report remain, therefore pursuant to VI.M of the AOC the report is disapproved.

Paragraph VI.M of the AOC stipulates that disapproval of a revised report shall be deemed a violation of the AOC unless waived by U.S. EPA. In consideration that the more critical deficiencies noted involve complex technical issues, the violation for the disapproved report is waived.

As noted in comment 1 of Attachment I of this letter, the issue concerning metal concentrations has not been resolved in that Techalloy has not provided a satisfactory delineation of metal constituents in groundwater. Techalloy shall resample/analyze monitoring wells as specified in Attachment I of this letter.

A revised report which addresses all comments of Attachment I shall be submitted within forty five (45) days of receipt of this letter. All revisions shall be identified in the revised report either by highlighting, underlining, or other appropriate means. The submittal letter shall note where the revisions are made in the report and also provide a brief explanation of the revision.

Section VI.F requires Respondent to submit a Corrective Measures Study (CMS) Workplan within thirty (30) days of submittal of the

Final RFI Report. U.S. EPA grants an extension to this deadline; Techalloy shall submit to U.S. EPA a Corrective Measures Study Workplan which contains the information in Attachment II of the above referenced AOC, within thirty (30) days of receipt of this letter.

The July progress report (incorrectly dated 1995), did not provide an update concerning implementation of institutional controls for the site. This information shall be provided in the next progress report and in future reports until the institutional controls are fully implemented.

If you have any questions please call me at (312) 886-4568.

Sincerely,

William Buller, Project Manager
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division
MI/WI Section

cc: Carlos Serna, Weston
Kevin Lesko, IEPA
John Koehnen, A.T.Kearney

bcc: J. Kline, ORC

AUTHOR COPY
BRANCH COPY
SECTION COPY

ATTACHMENT I

General Comments

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2. Though the cross-section depicted in Figure 6-10 does provide a profile of volatile organic constituent (VOC) concentrations and some insight as to DNAPL occurrence at the site, a discussion of the interpretation of this data was not found in the text. The revised report shall provide a thorough interpretative discussion of this data as pertaining to DNAPL occurrence.

Specific comments

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2. Figure 6-11 - GW8 should be changed to GW6 so as to agree with figure 6-9 which shows the cross-section locations.

3. An additional cross-section extending through sampling points GW6, GW2, and GW5 shall be included in the report.

4. Section 6.2.3 - The groundwater plume, taking into account the entire vertical profile, is about 1600 feet in width. Text shall be revised accordingly.

5. Section 6.3, bullet 7 - This part states that metal constituents is limited to on-site locations. This has not been verified and all of this part shall be deleted.

Bullet 8 - Text should be revised based on new groundwater analysis for metals.

6. Page 5-26 - Table 5-14 is referenced; Table 5-15 appears to be the correct reference.

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Mr. Henry Lopes
Techalloy Company, INC.
370 Franklin Turnpike
Mahwah, New Jersey 07430

4a. Article Number

P 054-656-578

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222 West Adams Street
Chicago, Illinois 60606
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Facsimile 312 223 6200

Management
Consultants

7/21/96

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RZ2-R05035.01-ID-014

ATKEARNEY

July 26, 1996

Mr. William Buller
U.S. EPA Region 5
77 W. Jackson, DRE-8J
Chicago, Illinois 60604

Reference: EPA Contract No. 68-W4-0006; EPA Work Assignment No. R05035;
Corrective Action Document Review; Techalloy Company Inc., Union,
Illinois; EPA ID No. ILD 005 178 975; Revised (June 1996) RCRA
Facility Investigation Report Review; Task 02 Deliverable

Dear Mr. Buller:

This letter report provides A.T. Kearney's review of the Revised RCRA Facility Investigation (RFI) Report (Report), dated June 1996, for the above-referenced facility. An electronic copy of this deliverable, formatted in Word Perfect 6.1 is also enclosed. In general, it appears that the Report adequately addresses the concerns and deficiencies identified in US EPA's May 29, 1996 letter to the facility.

The Report includes information which had been previously submitted in separate documents, including the "Supplemental RFI Off-site Groundwater Report" and the "Private Well Sampling Plan Report". A.T. Kearney previously provided US EPA with comments regarding the March 1996 RFI Report (A.T. Kearney deliverable RZ2-R05035.01-ID-010 dated May 10, 1996) and the "Supplemental RFI Off-site Groundwater Report (A.T. Kearney deliverable RZ2-R05035.01-ID-012 dated May 1, 1996), but was not tasked to review the "Private Well Sampling Plan Report". As you requested the Kearney Team evaluated the Report based on US EPA comments, but not with respect to the two separate deficiency letters generated by A.T. Kearney as cited above.

Mr. William Buller

July 26, 1996

Page 2

The US EPA letter of May 29, 1996, instructs Techalloy to implement institutional controls to restrict the installation of water wells in the contaminated groundwater area. Techalloy was required to respond within 15 days of receipt of this letter, providing proof of these institutional controls. The Report does not provide details regarding the implementation of these controls, nor a summary of the action taken. A separate notification may have been sent to the US EPA. Therefore it is recommended that US EPA determine whether the appropriate contacts had taken place within the allowed time period.

In addition, while the technical elements of the US EPA comments were addressed, a cursory evaluation of the continuity and cohesiveness of the combined document was performed. In general, the combined document provides an effective presentation. However, instances were noted where incorrect reference was provided to tables or figures (e.g., on Page 5-26 a reference is provided to Table 5-14 when the correct reference is Table 5-15). These discrepancies were not noted to occur frequently and US EPA may wish to evaluate whether requesting another revision to correct these discrepancies is necessary at this stage of the project.

Please feel free to contact me or the A.T. Kearney Work Assignment Manager, Mr. John Koehnen, at 312/223-6253 if you have any questions regarding this review.

Sincerely,



Patricia M. Brown-Derocher
Regional Manager

cc: F. Norling, Region 5
W. Jordan/Central Files
J. Koehnen
D. Walker
A. Williams



Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450
847-918-4000 • Fax 847-918-4055

021
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file 7/3/96
copy to ATE 7/1/96

28 June 1996
due 6/28/96

Mr. William Buller
U.S. EPA Region V
RCRA Enforcement Branch (HRE-8J)
77 West Jackson Blvd.
Chicago, IL 60604

Re: Final RFI Report for Techalloy Company, Inc., Union, Illinois.

Dear Mr. Buller:

Roy F. Weston, Inc. (WESTON®) is pleased to provide to the United States Environmental Protection Agency (U.S. EPA) a copy of the RFI Report for the above-referenced facility. In accordance with the U.S. EPA's letter dated May 29, 1996 WESTON has combined the information provided in "Supplemental RFI Off-site Groundwater Report" and the information provided in the "Private Well Sampling Plan Report" to form one complete and cohesive document.

As requested by the U.S. EPA, a new appendix was added to include summary of metal concentration in private well samples to date and two WESTON letters that were sent to U.S. EPA discussing the persistent nitrate problem in the McHenry County. Also included in the appendix is the nitrate concentration data for McHenry County provided by the McHenry County Health Department. Additionally, all specific comments pertaining to Section 5 have been addressed with appropriate information provided and/or corrected as indicated.

If you have any questions, please feel free to call me at (847) 918-4002.

Very truly yours,

ROY F. WESTON, INC.

Carlos J. Serna, P.G.
Senior Project Manager

CJS/sk
Enclosure

cc: Mr. Henry Lopes, Techalloy
Mr. David Williams, Techalloy
Mr. Scott Carr, Techalloy
Mr. Kevin Lesko, IEPA





Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450
847-918-4000 • Fax 847-918-4055

July 2, 1996

Mr. William Buller
U. S. Environmental Protection Agency
Region V
RCRA Enforcement Branch (HRE-8J)
77 West Jackson Boulevard
Chicago, Illinois 60604

Ref: Final RFI Report for Techalloy Company in Union, Illinois.

Dear Mr. Buller:

Roy F. Weston, Inc. (WESTON®) is pleased to provide the United States Environmental Protection Agency (U.S. EPA) with two additional copies of the above mentioned report.

If you have any questions or require additional information, please contact me at (708) 918-4021.

Very truly yours,

ROY F. WESTON, INC.

Jameel Ahmed, P.G.
Project Geologist

cc: Carlos Serna, WESTON



Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450
847-918-4000 • Fax 847-918-4055

copy to RCRA
file 7/3/96
copy to ATE 7/1/96

28 June 1996
due 6/28/96

Mr. William Buller
U.S. EPA Region V
RCRA Enforcement Branch (HRE-8J)
77 West Jackson Blvd.
Chicago, IL 60604

Re: Final RFI Report for Techalloy Company, Inc., Union, Illinois.

Dear Mr. Buller:

Roy F. Weston, Inc. (WESTON®) is pleased to provide to the United States Environmental Protection Agency (U.S. EPA) a copy of the RFI Report for the above-referenced facility. In accordance with the U.S. EPA's letter dated May 29, 1996 WESTON has combined the information provided in "Supplemental RFI Off-site Groundwater Report" and the information provided in the "Private Well Sampling Plan Report" to form one complete and cohesive document.

As requested by the U.S. EPA, a new appendix was added to include summary of metal concentration in private well samples to date and two WESTON letters that were sent to U.S. EPA discussing the persistent nitrate problem in the McHenry County. Also included in the appendix is the nitrate concentration data for McHenry County provided by the McHenry County Health Department. Additionally, all specific comments pertaining to Section 5 have been addressed with appropriate information provided and/or corrected as indicated.

If you have any questions, please feel free to call me at (847) 918-4002.

Very truly yours,

ROY F. WESTON, INC.

Carlos J. Serna, P.G.
Senior Project Manager

CJS/sk
Enclosure

cc: Mr. Henry Lopes, Techalloy
Mr. David Williams, Techalloy
Mr. Scott Carr, Techalloy
Mr. Kevin Lesko, IEPA





Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450
847-918-4000 • Fax 847-918-4055

July 2, 1996

Mr. William Buller
U. S. Environmental Protection Agency
Region V
RCRA Enforcement Branch (HRE-8J)
77 West Jackson Boulevard
Chicago, Illinois 60604

Ref: Final RFI Report for Techalloy Company in Union, Illinois.

Dear Mr. Buller:

Roy F. Weston, Inc. (WESTON®) is pleased to provide the United States Environmental Protection Agency (U.S. EPA) with two additional copies of the above mentioned report.

If you have any questions or require additional information, please contact me at (708) 918-4021.

Very truly yours,

ROY F. WESTON, INC.

Jameel Ahmed, P.G.
Project Geologist

cc: Carlos Serna, WESTON

D21

MAY 29 1996

DRE-8J

CERTIFIED MAIL
RETURN RECEIPT REQUEST

Mr. Henry Lopes
Techalloy Company, Inc.
370 Franklin Turnpike
Mahwah, New Jersey 07430

Re: Administrative Order On Consent
Docket No. V-W-007-93
ILD 005 178 975

Dear Mr. Lopes:

The United States Environmental Protection Agency (U.S.EPA) has reviewed the revised RCRA Facility Investigation (RFI) report dated March 1996, submitted by Techalloy in accordance with the above referenced Administrative Order on Consent (AOC). U.S. EPA concludes that revisions to the report as noted in Attachment I are needed, and pursuant to Section VI.M of the AOC disapproves the report. Techalloy shall, within thirty (30) days of receipt of this letter, submit a second revised RFI Report to U.S. EPA which addresses the comments of Attachment I.

Paragraph VI.M of the AOC stipulates that disapproval of a revised report shall be deemed a violation of the AOC unless waived by U.S. EPA. In consideration that Techalloy performed additional field data collection recently as requested by U.S. EPA, and that the time frame to perform the field work and develop a revised report may have been limited, the violation for the disapproved report is waived.

Upon review of the data collected in the recent field investigation, U.S. EPA has determined that the boundary of the Private Well Sampling Plan needs to be modified. The additional data indicates that the ground water contaminant plume has not moved downgradient significantly, therefore sampling at Highway 176 is not required. However, the lateral extent of the plume is greater than previously interpolated and any private wells that potentially may be contaminated need to be included in the sampling program. Pursuant to Section VI.A.2. of the AOC, the boundary of private well sampling program as shown in the approved Private Well Sampling Plan, shall be modified so as to extend

Non-responsive

Non-responsive

. This boundary shall be in effect for the next sampling event.

In U.S. EPA's letter of February 15, 1996, it was requested that an institutional control be implemented to restrict installation of water wells

in the contaminated groundwater area, and that the action taken in response to the request be discussed in the monthly progress reports. U.S. EPA records indicate that a response to this request has not been provided. Since the groundwater contaminants are well above drinking water standards, U.S. EPA concludes that the institutional control requested is needed to protect Human Health. Pursuant to Section VI.P of the AOC, Techalloy shall contact the appropriate authorities so as to implement the institutional control, and within fifteen (15) days of receipt of this letter, provide a summary of such action taken.

If you have any questions please call Bill Buller of my staff at (312) 886-4568.

Sincerely,

Paul Little, Chief
Enforcement and Compliance Assurance Branch
Waste and Pesticides and Toxics Division
MI/WI Section

cc: Kevin Lesko, IEPA

bcc: J. Kline, ORC

| AUTHOR'S FILE COPY |

ATTACHMENT I

COMMENTS ON RFI REPORT - MARCH, 1996 TECHALLOY COMPANY INC. UNION, ILLINOIS

(Comment numbers are referenced to Attachment I of
U.S. EPA's February 15, 1996, letter)

General Comments

(1) The report needs to be revised to include the information provided in "Supplemental RFI Off-site Groundwater Report" to ensure that a complete and cohesive document is provided. The text should be revised as appropriate; to avoid renumbering tables and figures these items may be presented in a separate listing.

(2) Wells were not resampled as recommended and Respondent has not demonstrated that lead as well as other metal constituents have not migrated from the facility. The text should be revised to state that the data may be interpreted differently. The text should include a discussion of the private well sampling program and the proposed pump and treatment system and how these Interim Measures may address metals in groundwater. A summary of metal concentrations in private well samples for the period of record should be included.

(6) The information referenced in Respondent's response to comments letter (data provided by the McHenry County Department of Health) was not provided or discussed in the Revised RFI Report. Revise the RFI Report to either include additional discussion on the nitrate concentrations in the county or include the Health Department data as an attachment/appendix.

Specific Comments

(12) Text references Table 5-10, the correct table is Table 5-11.

(14) The comments were adequately addressed in the response to comments letter, however neither the text nor Table 5-13 reflect a corresponding level of detail. Revise the RFI Report to include additional discussion as presented in the response to comments.

(15) Report does not provide an indication as to why the site-specific data necessary to evaluate ecological impacts at an individual level are not available or proposed for evaluation. Revise the RFI Report to include additional details on how an Ecological Risk Assessment will account for the inherently unique characteristics of individual populations by evaluating "terrestrial receptors as a whole".

(16) The correct table reference is Table 5-13. In addition, the information presented in the response to comment 16 is apparently not related to this comment. Evaluate the response to comment 16 and, if applicable, relate this information to an appropriate comment response.

A.T. Kearney, Inc.
222 West Adams Street
Chicago, Illinois 60606
312 648 0111
Facsimile 312 223 6200

Management
Consultants

RZ2.R05035.01.ID.012

May 10, 1996

ATKEARNEY

Mr. William Buller
Work Assignment Manager
US EPA Region 5
77 W. Jackson, DRE-8J
Chicago, Illinois 60604

Reference: EPA Contract No. 68-W4-0006; EPA Work Assignment No. R05035;
Corrective Action Document Review; Techalloy Company Inc., Union,
Illinois; EPA ID No. ILD005178975; Review of Revised RCRA Facility
Investigation (RFI) Report (March 1996); Task 02 Deliverable

Dear Mr. Buller:

Please find enclosed A.T. Kearney's review of the Revised RCRA Facility Investigation (RFI) Report for the above-referenced facility. An electronic copy of the deliverable, formatted in Wordperfect 5.1 is also provided.

This review consists of general and specific comments regarding the technical adequacy and accuracy of Techalloy's revisions to the original RFI Report submitted in August 1995. The revisions are in response to US EPA's comments submitted to the facility, based in part upon A.T. Kearney's deliverable of December 22, 1995. Please note that this review is based solely on an evaluation of the adequacy of Techalloy's responses to US EPA comments and not on those originally generated by the Kearney Team.

This review was performed contemporaneous to a review of the Supplemental Off-site Groundwater Report which was prepared by Techalloy following groundwater sampling which was performed in January 1996. The Revised RFI Report provides reference to information (i.e., text, tables, figures) found in the Supplemental Off-site Groundwater Report in addressing some of US EPA's comments. Where necessary, the information in the two documents was cross-checked to ensure technical adequacy.

Mr. William Buller
May 10, 1996
Page 2 of 2

In general, the Revised RFI Report satisfactorily addresses most of the US EPA comments. A few of the comments were not fully or adequately addressed, while others were adequately addressed in the response to comments but were not addressed adequately in the Revised RFI Report.

The following issue was first identified in the A.T. Kearney cover letter accompanying the original deliverable of December 22, 1995 but is re-iterated again for your review. The Draft RFI Report indicated that the detection limit for most volatile organic constituents (VOCs) in groundwater during the RFI was 10 ug/l. This detection limit is apparently the contracted detection limit for the laboratory used by Techalloy, as listed in Table 8-1 of the RCRA Facility Investigation Quality Assurance Program Plan (RFI QAPP) revised in September 1993. The 10 ug/l detection limit for VOCs in groundwater is at least 5 ug/l higher than the EPA SW-846 Method 8240 detection limits in several cases. Since the Maximum Concentration Limit (MCL) for several of the VOCs present in the groundwater at the Techalloy site is 5 ug/l, the Agency may wish to consider requiring Techalloy to use an analytical technique with a lower detection limit for analyzing groundwater samples during future investigative activities.

Please feel free to contact me or the A.T. Kearney Work Assignment Manager, Mr. John Koehnen, at 312/223-6253 if you have any questions.

Sincerely,

 FOR P.B.D.
Patricia M. Brown-Derocher
Regional Manager

cc: F. Norling, RPO EPA Region 5
W. Jordan/Central Files
J. Koehnen
D. Walker
A. Williams

**TECHALLOY COMPANY INC.
UNION, ILLINOIS
CORRECTIVE ACTION DOCUMENT REVIEW
US EPA ID NO. ILD005178975**

REVIEW OF REVISED RFI REPORT

Submitted to:

**Mr. William Buller
US Environmental Protection Agency
Region 5
77 W. Jackson DRE-8J
Chicago, Illinois 60604**

Submitted by:

**A.T. Kearney, Inc.
222 W. Adams Street
Chicago, Illinois 60606**

**EPA Work Assignment No.
Contract No.
A.T. Kearney WAM
Telephone No.
EPA WAM
Telephone No.**

**:R05035
:68-W4-0006
:John Koehnen
:(312)223-6253
:William Buller
:(312)886-4568**

May 10, 1996

**TECHALLOY COMPANY INC.
UNION, ILLINOIS
CORRECTIVE ACTION DOCUMENT REVIEW
US EPA ID NO. ILD005178975**

GENERAL COMMENTS

The Revised RFI Report has generally been revised in accordance with US EPA comments on the August 1995 RFI Report. However, due to the insertion of text, tables, and figures within the document, several of the reference locations (i.e., text, tables, figures) are now incorrect. For example, the table referenced by the facility while addressing Specific Comment 12 is identified as Table 5-10, however the correct table is Table 5-11. Review the document and revise the text, table and figure references as appropriate.

- General Comment 1:** This comment has not been adequately addressed in the Revised RCRA Facility Investigation Report (RFI Report). The information provided in the Supplemental Off-site Groundwater Investigation Report and the information provided during subsequent technical discussions with US EPA have addressed this comment adequately. Revise the RFI Report to include the additional information and results of these discussions to ensure that a complete and accurate document is presented for approval.
- General Comment 2:** This comment has been adequately addressed in the Revised RFI Report.
- General Comment 3:** This comment has been adequately addressed in the Revised RFI Report.
- General Comment 4:** This comment has been adequately addressed in the Revised RFI Report.
- General Comment 5:** This comment has not been adequately addressed in the Revised RFI Report. The response to the comment indicates that the RCRA Groundwater Monitoring Enforcement Guidance indicates that filtration with a 0.45 micron filter for soluble (dissolved) metals is the recommended procedures when analyzing metals in groundwater. However, the sampling techniques in the RCRA Groundwater Monitoring Enforcement Guidance are intended to collect data for establishing whether a release to groundwater has occurred from a Hazardous Waste Management Unit, not for collecting data to establish the risk to

SPECIFIC COMMENTS

- Specific Comment 1:** This comment has been adequately addressed in the Revised RFI Report.
- Specific Comment 2:** This comment has been adequately addressed in the Revised RFI Report.
- Specific Comment 3:** This comment has been adequately addressed in the Revised RFI Report.
- Specific Comment 4:** This comment has been adequately addressed in the Revised RFI Report.
- Specific Comment 5:** This comment has been adequately addressed in the Revised RFI Report.
- Specific Comment 6:** This comment has been adequately addressed in the Revised RFI Report.
- Specific Comment 7:** This comment has been adequately addressed in the Revised RFI Report.
- Specific Comment 8:** This comment has been adequately addressed in the Revised RFI Report.
- Specific Comment 9:** This comment has been adequately addressed in the Revised RFI Report.
- Specific Comment 10:** This comment has been adequately addressed in the Revised RFI Report.
- Specific Comment 11:** This comment has been adequately addressed in the Revised RFI Report.
- Specific Comment 12:** This comment has been adequately addressed in the Revised RFI Report. However, the text references Table 5-10 while the correct table is Table 5-11. Revise the document accordingly.
- Specific Comment 13:** This comment has been adequately addressed in the Revised RFI Report.

Specific Comment 22:

This comment has been adequately addressed in the Revised RFI Report. However, the response to the comment references the addition of Table 2-3 which includes all of the pertinent well construction information. The reference to Table 2-3 is incorrect and should be Table 2-2. The reference on page 2-6 identifies Table 2-2 as the correct table. Review the RFI Report and ensure that all references to this table correctly reference Table 2-2.

A.T. Kearney, Inc.
222 West Adams Street
Chicago, Illinois 60606
312 648 0111
Facsimile 312 223 6200

Management
Consultants

RZ2-R05035.01.ID.010

May 1, 1996

ATKEARNEY

Mr. William Buller
Work Assignment Manager
U.S. EPA Region 5
77 W. Jackson, HRE-8J
Chicago, Illinois 60604

Reference: EPA Contract No. 68-W4-0006; EPA Work Assignment No. R05035;
Corrective Action Document Review; Techalloy Company Inc., Union,
Illinois; EPA ID No. ILD005178975; Review of the Draft Supplemental
RCRA Facility Investigation (RFI), Off-Site Groundwater Report;
Deliverable for Task 2

Dear Mr. Buller:

Please find enclosed A.T. Kearney's review of the Draft Supplemental RCRA Facility Investigation (RFI), Off-site Groundwater Report (Supplemental Report) for the above-referenced facility. The review consists of general and specific comments regarding the technical adequacy and accuracy of the Report as it relates to the off-site groundwater contamination northwest of the Techalloy facility. This review was performed contemporaneous to a review of Techalloy's responses to comments on, and revisions to, the RFI Report (submitted under separate cover). An electronic copy of the deliverable, formatted in Wordperfect 5.1 format is provided.

The supplemental off-site groundwater investigation was performed by Techalloy in an attempt to better define the extent of the off-site groundwater contaminant plume. The information from the supplemental investigation was also used to determine whether any modifications would be necessary for the interim measures (i.e., groundwater pump and treat) that are to be implemented off-site, northwest of the facility. In general, the Supplemental Report adequately describes the procedures used during the investigations and presents the results of said investigation. However, several relatively minor issues were noted during our review and our deliverable includes comments that will improve the supplemental report if the minor issues are addressed in a revision to the report.

Mr. William Buller
May 1, 1996
Page 2

Please feel free to contact me or the A.T. Kearney Work Assignment Manager, Mr. John Koehnen, at 312/223-6253 if you have any questions regarding this review.

Sincerely,


Patricia M. Brown-Derocher
Regional Manager

cc: F. Norling, RPO EPA Region 5
W. Jordan/Central Files
J. Koehnen
D. Walker
A. Williams

**TECHALLOY COMPANY INC.
UNION, ILLINOIS
SUPPLEMENTAL RCRA FACILITY INVESTIGATION
OFF-SITE GROUNDWATER REPORT
U.S. EPA ID NO. ILD005178975**

REVIEW OF DRAFT OFF-SITE GROUNDWATER REPORT

Submitted to:

**Mr. William Buller
U.S. Environmental Protection Agency
Region 5
77 W. Jackson DRE-8J
Chicago, Illinois 60604**

Submitted by:

**A.T. Kearney, Inc.
222 W. Adams Street
Chicago, Illinois 60606**

**EPA Work Assignment No.
Contract No.
A.T. Kearney WAM
Telephone No.
EPA WAM
Telephone No.**

**:R05035
:68-W4-0006
:John Koehnen
:(312)223-6253
:William Buller
:(312)886-4568**

May 1, 1996

**TECHALLOY COMPANY INC.
UNION, ILLINOIS
SUPPLEMENTAL RCRA FACILITY INVESTIGATION
OFF-SITE GROUNDWATER REPORT
U.S. EPA ID NO. ILD005178975**

GENERAL COMMENTS

1. The Supplemental RCRA Facility Investigation, Off-site Groundwater Report (Supplemental Report) presents a significant volume of data acquired from groundwater samples off-site and to the northwest of the facility. However, the constituent names and concentrations reported for GW-5 on Figure 3-2 are not correct. Revise the figure by consulting Appendix A, pages 8 through 18 for well GW-5 for the correct concentrations. In addition, since at least one transcription error was noted, review the report and figures against the analytical results to ensure that the information presented is accurate.
2. The Executive Summary (page ES-2) and Section 3.2 (page 3-10) of the Supplemental Report state that the lateral and vertical extent of the plume have been delineated. The statement that the lateral extent of the plume has been defined is not entirely accurate since volatile organic constituents (VOCs) were detected at low concentrations in one or more sampling intervals at GW-4, GW-5, GW-8 and GW-9. Techalloy assumed that since only low concentrations of VOCs were detected in these "plume" perimeter sample points, the actual plume boundaries did not extend far beyond these points. Revise the statements to indicate that the lateral and vertical extent of the plume have been interpolated through the use of available analytical data and interpretive tools.

2.4 DECONTAMINATION PROCEDURES (Pages 2-5 to 2-7)

3. The Supplemental Report does not provide adequate detail regarding the decontamination of the equipment, specifically relating to the location selected for decontamination. Provide additional information which details the location of the decontamination area, the type of containment device(s) used to collect the resulting fluid/solids, and the procedures used to store, treat or dispose of the resulting investigation derived wastes. In addition, provide additional details on the procedures employed to prevent contamination of clean equipment during transport, or by incidental contact with other equipment which may have already been used. Revise the Supplemental Report as appropriate.

SECTION 3 RESULTS OF THE GROUNDWATER SAMPLING ACTIVITIES (Pages 3-1 to 3-19)

3.3 CHLORINATED HYDROCARBON DEGRADATION (Pages 3-10 to 3-11)

4. The statement made on page 3-11 of the Supplemental Report implies that degradation has been occurring on the organic constituents within the plume. This statement should be revised to indicate that natural degradation through co-metabolism processes is occurring. However, the degradation appears to be very limited since the process has not progressed to vinyl chloride, which is typically considered an indicator of progression of the degradation process. Revise the Supplemental Report to clarify the (potential) degradation process and to identify key steps in the process.

SECTION 4 CONCLUSIONS (pages 4-1 and 4-2)

5. The conclusions section of the Supplemental Report provides only a limited overview of the results of the Supplemental activities. Additional information should be presented which indicates how the resulting information will be applied to define future activities and/or affect the scope and nature of the interim measures that will be performed. Revise the Supplemental Report to include additional interpretation of the investigative results.



Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450
708-918-4000 • Fax 708-918-4055

Effective 1/20/96
Our NEW Area Code
is 847

D21

29 March 1996

Received
3/29/96

Mr. William Buller
U.S. Environmental Protection Agency
Region V
RCRA Enforcement Branch (HRE-8J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Re: RFI Report for Techalloy Company, Inc.
Union, Illinois

Dear Mr. Buller:

Roy F. Weston, Inc. (WESTON®) is pleased to provide the United States Environmental Protection Agency (U.S. EPA) with two copies of the RFI Report for the above referenced facility. This report incorporates applicable information, new text (*italicized*), and figures in accordance with U.S. EPA's comments on the Draft RFI Report. Also included are two draft copies of "Supplemental RCRA Facility Investigation Offsite Groundwater Report", a copy of WESTON's responses to the U.S. EPA's comments, and a copy of a letter with information in nitrate concentrations in this area.

WESTON will forward a copy of the letter (addressed to Director of McHenry County Health Department) that calls for restriction on the issuance of well permits in certain areas of Union, Illinois.

If you have any questions, please feel free to call me at (847) 918-4002.

Very truly yours,

ROY F. WESTON, INC.

Carlos J. Serna, P.G.
Senior Project Manager

CJS/kvh

Encl.

cc: Kevin Lesko, IEPA



A.T. Kearney, Inc.
222 West Adams Street
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312 648 0111
Facsimile 312 223 6200

Management
Consultants

1721
RZ2-R05035.01-EP-008

ATKEARNEY

February 14, 1996

Mr. William Buller
Work Assignment Manager
U.S. EPA Region 5
77 W. Jackson, HRE-8J
Chicago, Illinois 60604

Reference: EPA Contract No. 68-W4-0006; EPA Work Assignment No. R05035;
Corrective Action Document Review; Techalloy Company Inc., Union,
Illinois; EPA ID No. ILD005178975; Review of the U.S. EPA
Comments for the Draft RCRA Facility Investigation (RFI) Report;
Deliverable for Task 2

Dear Mr. Buller:

As you requested, A.T. Kearney has reviewed your draft deficiency comments prepared for Techalloy's Draft RCRA Facility Investigation (RFI) Report. The review consisted of a technical evaluation of your comments against those generated by the A.T. Kearney Team submitted to U.S. EPA Region 5 on December 22, 1995.

We feel that your comments, while less detailed than those submitted by A.T. Kearney, have identified the key deficiencies within Techalloy's Draft RFI Report. Due to the facility's knowledge of the site conditions and concerns, these comments appear to be adequate to effectively guide Techalloy in the revision of their RFI Report to U.S. EPA's satisfaction. Therefore, with your concurrence that your comments represent the key issues of concern and the technical deficiencies in the Draft RFI Report, A.T. Kearney agrees with your intent to forward your comments to Techalloy.

Also, as you discussed with Mr. John Koehnen, the A.T. Kearney WAM on both Friday February 9, 1996 and Monday February 12, 1996, A.T. Kearney will strive to continue to provide you with comments which describe in detail the deficiency, where the deficiency is located in the document, how the deficiency could be corrected and the steps necessary to correct the deficiency. We feel that this comment format, while text-rich, will give you the information necessary to fully evaluate the nature of the deficiency and specific concerns and provide a suggested course of action to correct the deficiency.

Mr. William Buller
February 13, 1996
Page 2 of 2

Please feel free to contact me or the A.T. Kearney Work Assignment Manager, Mr. John Koehnen, at 312/223-6253 if you have any questions regarding this review.

Sincerely,



Patricia M. Brown-Derocher
Regional Manager

cc: F. Norling, RPO EPA Region 5
W. Jordan/Central Files
J. Koehnen
D. Walker
A. Williams

P 054 656 602



Receipt for Certified Mail

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☆ U.S. GPO: 1991—302-916

FEB 15 1996

FEB

DRE-8J

CERTIFIED MAIL
RETURN RECEIPT REQUIRED

Mr. Henry Lopes
Techalloy Company, Inc.
370 Franklin Turnpike
Mahwah, New Jersey 07430

Re: Administrative Order on Consent
Techalloy Company, Inc.
Docket No. V-W-007-93
ILD 005 178 975

Dear Mr. Lopes:

The United States Environmental Protection Agency (U.S. EPA) has received the RCRA Facility Investigation (RFI) Report dated August, 1995 which was submitted by Techalloy in accordance with the above referenced Administrative Order on Consent (AOC). Upon review of the report, U.S. EPA concludes that certain revisions are needed, therefore in Accordance with paragraph VI.M. of the AOC, the report is disapproved. The revisions as noted in Attachment 1 of this letter shall be addressed in a revised report. U.S. EPA understands that field work was initiated recently in response to discussions between Techalloy and U.S. EPA representatives. A revised report shall be submitted by March 31, 1996, or within forty five (45) days of receipt of this letter, whichever is the latest. Please have the revised report signed by the appropriate parties, and unless a completely revised report is provided, please identify each revised page by revision date.

Also, an institutional control for the contaminated groundwater area shall be implemented. Restriction of shallow well permits by the McHenry County Health Department is probably the most effective means to implement this control. Please provide an update to this activity in your next progress report, or in subsequent progress reports as needed, to verify this implementation.

The U.S. EPA letter of November 22, 1995, called for an attestation pertaining to the list of properties with water wells in the expanded sampling area, including the interior portions of sections 32 and 33. The attestation provided by you dated January 15, 1996, refers to residences at Highway 176 only. The attestation should address the entire area impacted by the groundwater contaminant plume.

It is critical that the comments be addressed and additional data collected as needed so as to develop a complete the RFI. It may be appropriate for Techalloy and U.S. EPA staff to meet in the near future to discuss technical

matters, please call me at (312) 886-4568 to arrange such meeting, or to discuss any questions you may have.

Sincerely,

William Buller, Project Manager
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division
MI/WI Section

cc: Kevin Lesko, IEPA/with attachment
John Koehnen, A.T. Kearney/with attachment

bcc: J. Kline, ORC

| AUTHOR'S FILE COPY |



Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450
708-918-4000 • Fax 708-918-4055

721
RECEIVED
FEB 02 1996

29 January 1996
OFFICE OF RCRA
WASTE MANAGEMENT DIVISION
EPA REGION V

Mr. William Buller
U.S. EPA, Region V
RCRA Enforcement Branch (HRE-8J)
77 West Jackson Boulevard
Chicago, Illinois 60604

Work Order No. 01989-021-001

Re: Revised logs of the RFI Report- Techalloy Company in Union, Illinois

Dear Mr. Buller:

Roy F. Weston, Inc. (WESTON®) is providing U.S. EPA with the revised geologic drill logs for those borings that were extended to the base of aquifer to sample the shallow and the deep groundwater samples. The deep groundwater samples represented samples collected at the base of the aquifer slightly above the sand and gravel and the silty clay interface. These logs were part of the RFI field activity conducted by WESTON in September 1994 and March 1995, and its subsequent RFI Report submitted to the U.S. EPA in August 1995. The confining layer of silty clay was observed in the lead 2-foot slotted rod of the Geoprobe that was utilized to sample the groundwater samples. Also included are a copy each of figures 6-1 and 6-2 of the above mentioned RFI Report

If you have any questions or require additional information, please do not hesitate to contact me at (708) 918-4000.

Very truly yours,

ROY F. WESTON, INC.

Jameel Ahmed, P.G.
Associate Geologist

JA:sk

cc: Carlos Serna, WESTON (letter only)
Henry Lopes, Techalloy (letter only)
David Williams, Techalloy (letter only)
Scott Carr, Techalloy (letter only)



Received 8/30/95

D21



Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450
708-918-4000 • Fax 708-918-4055

Mr. William Buller
U. S. Environmental Protection Agency
Region V
RCRA Enforcement Branch (HRE-8J)
77 West Jackson Boulevard
Chicago, Illinois 60604

29 August 1995

Ref: Techalloy Company, Inc., 6501 Olson Road, Union, Illinois.

Dear Mr. Buller:

Roy F. Weston, Inc. (WESTON®) is pleased to submit Draft RCRA Facility Investigation (RFI) Report for the above referenced facility.

If you have any questions or require additional information, please call me at (708) 918-4002.

Very truly yours,

ROY F. WESTON, INC.

Carlos J. Serna, P.G.
Senior Project Manager

cc: Kevin Lesko, IEPA
John Thorsen, P.E., WESTON
David Williams, Techalloy
Henry Lopes, Techalloy





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

JUL 08 1994

REPLY TO THE ATTENTION OF:

HRE-8J

Mr. Herny Lopes
Techalloy Company, Inc.
370 Franklin Turnpike
Mahwah, New Jersey 07430

Re: RFI Report
Techalloy Company, Inc.
ILD 005 178 975

Dear Mr. Lopes:

The United States Environmental Protection Agency (U.S. EPA) is in receipt of the May 31, 1994, letter submitted by Roy F. Weston, Inc. in your behalf.

This letter requested a waiver of any violation of the Corrective Action Order of Consent (V-W-007-93) that may have occurred.

Your request for a waiver is hereby denied. U.S. EPA reserves its rights to undertake actions necessary to rectify any noncompliance with the Consent Order including additional enforcement actions and stipulated penalty demands.

If you have any questions concerning this matter, please contact Mr. William Buller at (312) 886-4568.

Sincerely yours,

A handwritten signature in black ink, appearing to read "KMP", written over a horizontal line.

Kevin M. Pierard, Chief
Technical Enforcement Section #1

cc: Carlos Sernas, Weston

HRE-8J

Mr. Herny Lopes
Techalloy Company, Inc.
370 Franklin Turnpike
Mahwah, New Jersey 07430

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Techalloy Company, Inc.
ILD 005 178 975

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If you have any questions concerning this matter, please contact Mr. William Buller at (312) 886-4568.

Sincerely yours,

Kevin M. Pierard, Chief
Technical Enforcement Section #1

cc: Carlos Sernas, Weston

bcc: J. Kline, ORC

REB:asimpkins:wbuller/07/07/94:Filename:tech.1opes

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SIGNATURE/INITIAL CONCURRENCE REQUESTED - RCRA ENFORCEMENT BRANCH (REB)									
TYP.	AUTH	IL/IN TES CHIEF	MI/WI TES CHIEF	MN/OH TES CHIEF	IL/MI/WI EPS CHIEF	IN/MN/OH EPS CHIEF	REB BRANCH CHIEF	RCRA ASSOC. DIR.	WMD DIV. DIR.
<i>WJ</i> 7/7/94	<i>WJ</i> 7/7/94			<i>WJ</i> 7.7.94					

JUN 25 1994

HRE-8J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Henry Lopes
Techalloy Company, Inc.
370 Franklin Turnpike
Mahwah, New Jersey 07430

Re: RFI Workplan Approval
Techalloy Company, Inc.
ILD 005 178 975

Dear Mr. Lopes:

The United States Environmental Protection Agency (U.S. EPA) has reviewed the document "RCRA Facility Investigation Workplan-Techalloy Company, Inc., Union, Illinois," as revised March 1994, and the incorporated Quality Assurance Project Plan-Revision II, which was submitted in accordance with Section VI.B of the Administrative Order on Consent (AOC), Docket No. V-W-007-93.

The U.S. EPA hereby approves the above-referenced document, with the modifications (items 1-11) as stated below, and the modifications as given in Attachment I which shall be implemented by Weston-Gulf Coast Laboratories prior to any data collected pursuant to the above referenced Workplan.

Modifications

- (1) Sec. 2.5.2, p. 2-46, bullet 2 - The sentence "SVOCs are not migrating in ground water" is deleted; bullet 3 - The sentence "metals are present, but not migrating off site" is deleted.
- (2) Sec. 2.15.3, p. 2-47, third paragraph - The sentences: "The reported constituents....consist of VOCs"; and "A chemical company.... inorganic contamination", are deleted.
- (3) Sec. 5.2.4, p. 5-14, first paragraph, 6th line - The word (seven) is deleted.
- (4) Any and all action levels presented are deleted.
- (5) All monitoring wells shall be tested, with appropriately sensitive instruments, for light and dense non-aqueous liquids.

(6) Monitoring well MW-7 shall be sampled and analyzed for semi-volatile organic compounds (SVOCs).

(7) At the sampling location WS-21, groundwater samples shall be collected at fifteen (15) foot intervals to a depth of eighty (80) feet, or to the base of the aquifer if it occurs at a shallower depth. The analytical methods with the lowest detection limits, as specified in the Quality Assurance Project Plan, (QAPjP) shall be employed.

(8) All data developed through Interim Measures activities shall be included in the RCRA Facilities Investigation (RFI) report.

(9) The time frame to submit the draft RCRA Facility Investigation (RFI) report, after RFI Workplan approval by U.S. EPA, shall be 400 days. The draft RFI report shall include Phase II results. U.S. EPA will not necessarily review a Phase I Technical Memorandum and a Phase II outline, or meet with Techalloy representatives upon completion of RFI Phase I.

(10) The Illinois Environmental Protection Agency's clean-up levels, as applicable, and as in effect on the date of this letter, are incorporated into Tables 2-12.1 through 2-12.3 of the QAPjP.

(11) The following analyses are added to Table 2-14 of the QAPjP: SVOCs in soils; ammonia, chloride, nitrate, and sulfate in groundwater.

The RFI report shall provide verification by Weston-Gulf Coast Laboratories that all modifications as stated in Attachment I were implemented prior to data collection.

Pursuant to Section IX.B. of the AOC, Respondent is required to make best efforts to gain off-site property (property not owned or controlled by Respondent) access within thirty (30) days of approval of any Workplan which requires off-site access. The approved RFI Workplan requires off-site access. Respondent shall expeditiously seek access for all off-site locations which may require access, so as to assure performance of the RFI and completion of the RFI draft report within the time frame set forth in item 9 above.

Approval by U.S. EPA of the Health and Safety Plan is not required; approval of the RFI Workplan does not include approval of the Health and Safety Plan.

If you have any questions concerning these matters, please call me at (312) 886-4568.

Sincerely yours,

William Buller

William Buller, Project Manager
Technical Enforcement Section #1
RCRA Enforcement Branch

Enclosure

cc: Carlos Sernas, Weston
Kevin Lesko, IEPA

bcc: J. Kline, ORC

HRE-8J/WB/be/6-4568/7/21/94/Filename:TECHRFIW.APP

OFFICIAL FILE COPY

CONCURRENCE REQUESTED FROM REB			
SEC/BR SECRTRY	REB STAFF	REB SECTION CHIEF	REB BRANCH CHIEF
	mp 7/21/94		

ATTACHMENT I

Actions Required by Weston-Gulf Coast Laboratories

1. All commercial lots of reagents shall be tested for metals before being used in the laboratory.
2. The analytical balance used for inorganic sample preparation shall be placed in a protective enclosure similar to that used for the balance in the organic preparation area.
3. Each TCLP sample extract shall be preserved immediately after it is filtered instead of filtering a batch of samples and then preserving them.
4. The pH of all inorganic samples shall be checked at the time of receipt and the pH of all volatile samples shall be checked at the time of analysis.
5. The results for the individual isomers, cis-and trans of 1,2-dichloroethylene, shall be reported.
6. Soil samples for TCLP metal samples need to be homogenized. The samples shall be broken down into 3/8 inch pieces or smaller, and sieved prior to the leaching procedure, as required by method 1311.
7. All multiple analyses/dilutions, and multiple blanks within a dataset shall be clearly identified.

DER:

Complete items 1 and/or 2 for additional services.
Complete items 3, and 4a & b.

Print your name and address on the reverse of this form so that we can return this card to you.

Attach this form to the front of the mailpiece, or on the back if space is not permitted.

Check "Return Receipt Requested" on the mailpiece below the article number. The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address

2. ☐ Restricted Delivery

Consult postmaster for fee.

Article Addressed to:

My Lopes
Alloy Company, Inc.
Franklin Turnpike
Mahwah, New Jersey 07430

4a. Article Number

P564 478 115

4b. Service Type

☐ Registered

☐ Insured

☒ Certified

☐ COD

☐ Express Mail

☐ Return Receipt for Merchandise

7. Date of Delivery

7-29-94 7 26 94

Signature (Addressee)

Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

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77 W. Jackson Blvd.
Chicago, IL 60604





Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450
708-918-4000 • Fax 708-918-4055

RECEIVED
MAR 23 1994
OFFICE OF RCRA
WASTE MANAGEMENT DIVISION
EPA REGION V

Mr. Joseph M. Boyle, Chief
RCRA Enforcement Branch
United States Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Work Order No. 01989-009-001-0040

Re: Response to Comments for the Draft RFI Work Plan and QAPP for Techalloy Company, Inc. Located in Union, Illinois

Dear Mr. Boyle:

Enclosed are the corrected pages to the RFI work plan and QAPP. The comments indicated in your letter dated 8 February 1994 have been addressed as requested. Only the pages where changes occurred are contained in this packet. These pages are identified by Revision: 1 (work plan) and Revision: 2 (QAPP) in the header with a corresponding date of 24 March 1994. Please insert these pages into your copies.

It is Techalloy Company's desire to begin the investigation so that it can responsibly address environmental concerns around the facility. Performing the field work during this summer will contribute to the speed and quality of the project.

The remainder of this letter provides a summary of the comments made by the U.S. EPA and the responses. The numbers in parentheses refer to the reviewer's outline structure.

WORK PLAN COMMENTS

COMMENT: Section 1.0, PURPOSE, This paragraph should also quote or reference Section VI.C and the purpose statement of Attachment I of the AOC.

RESPONSE: Section 1 of the work plan is modified to include references to Section VI.C and the purpose statement of Attachment 1 of the AOC.

COMMENT: Section 2.0, page 2-47, - Delete sentence pertaining to Southern California Chemical.

RESPONSE: The sentence has been modified to reflect a generic "chemical company."

Mr. Joseph M. Boyle
U.S. EPA

-2-

23 March 1994

COMMENT: Section 2.5.1. - This section refers to metals and inorganic analyses of soil sample SB-05. These results could not be identified and should be provided. The statement "concentrations of inorganics are of little concern" should be justified or deleted.

RESPONSE: The location of SB-05 is shown on Figure 2-5 and the inorganic data associated with this sampling location is summarized on Table 2-1. The statement, "concentrations of other inorganics are of little concern" is deleted and replaced with a sentence reflecting the detection of arsenic, barium, cadmium, and sulfate at this sampling location.

COMMENT: 2.5.3 - This section notes the inorganic constituents in a Union well 3 sample and the volatile organic compounds (VOCs) in the plume emanating from the Techalloy facility, and states that "these constituents are inconsistent." Inorganic analytical groundwater data has not been provided to support this statement.

RESPONSE: The statement is modified to state that the MW-3 well reportedly contains primarily inorganic constituents while the plume emanating from the Techalloy facility consists primarily of VOCs.

COMMENT: Section 5.2.1. - Soil samples shall also be analyzed for semi-volatile organic compounds (SVOCs), or provide rationale for not analyzing for these compounds.

RESPONSE: Historical information regarding the processes and materials used at the Techalloy facility and the results of previous investigations indicate VOCs, metals, and possibly cyanide as the primary analytes of concern. SVOCs have apparently not been used during the manufacturing process and have been analyzed for on occasion in the past with no apparent detections. As discussed in the pre-QAPP meeting of 31 March 1993, Techalloy agreed to sample SVOCs for selected groundwater locations. Groundwater has been identified as the primary contaminant migration pathway. SVOCs have been analyzed previously in groundwater in the center of the plume (MW-07) and were not detected. Based on recent conversations with U.S. EPA, limited SVOCs will be analyzed in soil samples collected in the BG-5 Oil Drum Storage Area and Concrete Evaporation Pad to gather information that will be applicable for future remedial planning. Additionally, SVOC samples will be collected for **upgradient soils to determine** the background concentration of SVOCs in soils.

COMMENT: 5.2.4. The RFI should identify all actual and potential receptors.

Mr. Joseph M. Boyle
U.S. EPA

-3-

23 March 1994

RESPONSE: The names and addresses of the twelve residential wells identified and sampled as discussed in the "Private Well Sampling Plan, February 1993," are summarized on Table 5-2A.

COMMENT: Section 5.2.1. (Table 5-3) Based upon the past usage of the spent acid holding pond, analyses should include **nitrate**, chloride, sulfate, calcium, sodium, potassium, and ammonium.

RESPONSE: Table 5-3 is modified to include the analysis of the following inorganic parameters ammonium, chloride, nitrate, and sulfate - for soil samples collected from the spent acid holding pond. Additionally, the metals analysis will include calcium, sodium and potassium.

COMMENT: Monitoring wells MW-7 and MW-5 should also be analyzed for these constituents. Table 5-3 should specify the specific metal analyses to be performed.

RESPONSE: Table 5-3 is modified to include the analysis of inorganic parameters as stated in comment 7 for MW-7 and MW-5. Specific metals included in the metals analysis are contained in Table 8-2 of the QAPP.

COMMENT: A representative groundwater sample shall be collected near the probe sample SW-21 of Figure 3-4 and analyzed for VOCs.

RESPONSE: The RFI work plan is modified to include the collection of a representative groundwater sample near the existing probe location SW-21. This sample will be collected using a Geoprobe and analyzed for VOCs to verify the downgradient extent of contamination.

COMMENT: Provide cross-sections (transverse to plume mainly) showing water levels, contaminant concentrations, lithology, and depth intervals of probe and auger samples. If this data does not assure representative samples of the contaminant plume were collected, additional groundwater samples should be proposed at appropriate depth intervals and locations.

RESPONSE: Cross sections parallel and transverse to the groundwater plume have been constructed and included in the RFI work plan. These cross sections contain the requested information in the comment. The data indicates that the plume has been adequately delineated and no further groundwater samples are proposed.

Mr. Joseph M. Boyle
U.S. EPA

-4-

23 March 1994

COMMENT: Provide an illustration similar to figure 3-4 which delineates plume based on total VOC concentrations.

RESPONSE: An illustration similar to Figure 2-10 has been constructed and is included in the RFI work plan. It does not appear that the configuration of the plume is significantly changed from that depicted in existing Figure 2-10.

COMMENT: Revise figure 5-3 to show time frames in weeks without specific dates. Time frame to submit draft RFI report after U.S. EPA approval of RFI work plan shall be specified to be 360 days. Revise Section 5.5 accordingly.

RESPONSE: Figure 5-3 has been revised to show a 400 day time frame from U.S. EPA approval of the RFI work plan until submission of the draft RFI report.

COMMENT: Rather than implementing RFI Phase II under a separate Work Plan, Phase II shall be implemented after Phase I results have been evaluated. Phase II shall include any additional data collection to fill any data gaps as identified by Phase I results. The Phase II results shall be included in the RFI draft report.

RESPONSE: The RFI schedule has been revised as requested. Techalloy will present an outline of Phase II activities to the U.S. EPA upon completion of the Phase I Technical Memorandum at a meeting at agency headquarters. It is assumed that an agreement or any modifications to the Phase II activities will be approved at this meeting. No agency review time is assumed in the schedule. Phase II mobilization will begin following the meeting. The schedule also assumes no off-site Phase II activities will be conducted which may require access agreements. Phase II will be limited to identifying and resolving data gaps in the Phase I investigation. If the agency requires a review period and/or off-site access is required, the schedule will no longer be appropriate and will need to be revised to indicate changes.

COMMENT: Ecological Assessment - Identify and describe the habitat possibly affected by contaminants from the facility. Specify if there are any old-field or edge habitats and if the holding pond has been utilized by birds.

Describe methods for a qualitative assessment (e.g. reconnaissance survey) of plants and animals at or near the facility. Include a written confirmation from the U.S. Fish and Wildlife Service, Chicago Metro Field Office, that the following federally listed or proposed threatened or endangered species are not present at or near the facility: Bald Eagle; Indiana Bat; and prairie Bush Clover. The assessment should identify any known or observed adverse effects (stressed vegetation, bird carcasses, or other obvious impacts) by

Mr. Joseph M. Boyle
U.S. EPA

-5-

23 March 1994

site contaminants to biota. State whether or not any adverse effects have been noted by employees or other observers.

Describe methods to evaluate potential impacts of contaminants on plants and animals. These methods should include analysis of available data, fate and transport analysis, toxicity criteria, and standards for all contaminants of concern.

RESPONSE: The RFI work plan has been modified to include an ecological assessment task (described in new Subsection 5.2.4.1). This assessment will utilize data from site investigation, open literature, and relevant benchmark values to qualitatively determine whether it can be safely assumed that site chemicals pose no threat to ecological receptors.

COMMENT: Section 7.2.3 - Delete, specifies U.S. EPA responsibilities not stated in the AOC.

RESPONSE: Section 7.2.3 is deleted from the RFI work plan.

QAPP COMMENTS

COMMENT: Change the name of the Regional QA Manager. (1.0.a.)

RESPONSE: The new name now appears on the signoff page in the QAPP.

COMMENT: Add the name of the laboratory QA Manager. (1.0.b.)

RESPONSE: The laboratory QA Manager's name now appears on the signoff page in the QAPP.

COMMENT: Provide the project objectives. (2.1.1.)

RESPONSE: The project objectives, already available in the Work Plan, now appear in the QAPP as well, at page 2-1.

COMMENT: Provide the project status and phase. (2.1.2.)

RESPONSE: The project status and phase, already available in the Work Plan, now appear in the QAPP as well, at page 2-1.

COMMENT: Identify analytical methods and detection limits for past data. (2.2.1.a.)

Mr. Joseph M. Boyle
U.S. EPA

-6-

23 March 1994

RESPONSE: The QAPP's tables now identifies all analytical methods and detection limits in every table referencing historical data.

COMMENT: Specify sampling techniques for past data. (2.2.1.b.)

RESPONSE: The tables now contain brief descriptions of the sampling techniques.

COMMENT: Summarize the past results. (2.2.1.c.)

RESPONSE: Section 2 of the QAPP summarizes the past results. No global change is required.

COMMENT: Explain why dissolved metals were used. (2.2.1.d.)

RESPONSE: The QAPP, at page 2-28, now explains that dissolved metals were used to aid the reproducibility of the results.

COMMENT: Explain the limitations and capabilities of headspace sampling. (2.2.1.e.)

RESPONSE: The QAPP, at page 2-31, now explains the limitations and capabilities of headspace sampling.

COMMENT: Define what an on-site or off-site objective is. (2.2.1.f.)

RESPONSE: Table 2-8 of the QAPP now provides citations to the Illinois Administrative Code.

COMMENT: Explain the basis for the past use of TCLP analyses. (2.2.1.g.)

RESPONSE: The QAPP, at page 2-40, now explains that TCLP analyses provided disposal information.

COMMENT: Identify the locations of TT3 and TT4. (2.2.1.h.)

RESPONSE: Figure 2-11 of the QAPP now displays the locations of TT3 and TT4.

COMMENT: Describe the current status of the drums in the BG-5 drum storage area. (2.2.1.i.I.)

Mr. Joseph M. Boyle
U.S. EPA

-7-

23 March 1994

RESPONSE: The QAPP, at page 2-40.1, now provides an update of the area's contents. Because Techalloy is an active facility operating under RCRA's generator regulations, the individual drums discussed in Revision 1 of the QAPP are no longer present, having been shipped to RCRA TSDs. The area today contains a different set of drums. The status of drums in storage continues to change from day to day. The QAPP's description is now accurate as of March 1994. It is hoped that future changes to the inventory will not require revisions to the QAPP.

COMMENT: Describe previous analyses in the drum storage area. (2.2.1.i.II.)

RESPONSE: No previous analyses were performed. According to the MSDS for BG-5, the material contains aliphatic petroleum hydrocarbons. After contact with stainless steel, the waste BG-5 probably contains metals such as iron.

COMMENT: Describe the project's current status. (2.2.3.a. -- gap in the outline exists in original outline)

RESPONSE: The QAPP now contains a supplemental description of the project's status at Page 2-1.

COMMENT: Provide a geological model. (2.3.3.b.)

RESPONSE: The QAPP text, at page 2-15, provides a cross-reference to the work plan's geological model, which appears at Figure 2-10a of the Work Plan.

COMMENT: Resolve the conflict arising from knowing the constituents' distribution while not knowing their precise distribution. (2.3.3.c.)

RESPONSE: The QAPP text, at page 2-38, now explains that although the *general* distribution is known, the *precise* distribution is unknown.

COMMENT: Explain the absence of organic analyses in the previous SWMUs. (2.3.3.d.)

RESPONSE: The previous SWMUs consisted of inorganic reaction vessels. The chemicals employed in those vessels are well understood, and the chemicals are not organics. Based on that knowledge, organic analyses were not necessary

COMMENT: Provide confirmatory samples. (2.3.3.e.I.)

Mr. Joseph M. Boyle
U.S. EPA

-8-

23 March 1994

RESPONSE: The QAPP, at page 2-40.1 et seq., now clearly states that borings will be installed in and around each SWMU. The text provides a cross reference to Sections 2 and 3 of the FSP. The FSP identifies the sample locations, the analyses to be performed, and sampling procedures and protocols.

COMMENT: Identify the sampling technique for migration pathways. (2.3.3.e.II.)

RESPONSE: The QAPP, at page 2-40.1 et seq., now describes the round of sampling to be conducted in all 13 existing nearby wells. The QAPP assures that filtered and unfiltered samples will receive analysis for metals.

COMMENT: Identify the number of samples, their locations, and their methods. (2.3.3.e.III.)

RESPONSE: The QAPP, at page 2-40.1 et seq., now provides some additional information. The FSP provides any remaining information. The QAPP text provides a cross reference to the FSP.

COMMENT: Explain how groundwater metal samples were withdrawn and what analyses were performed for metals. (2.3.3.e.IV.)

RESPONSE: It is true that bailers and filtered samples were used. No change is needed in the QAPP.

COMMENT: Provide additional documentation or models of potential receptors. (2.3.3.e.V.1.)

RESPONSE: Models typically provide a predictive tool when data is scarce or unobtainable. At Techalloy, extensive sampling and historical data supports the conclusions regarding potential receptors.

COMMENT: Resolve the inconsistency between PRC's work and later work by Techalloy. (2.3.3.e.V.2.)

RESPONSE: The use of the word "inconsistent" does not imply a data quality problem. Instead, it merely signals that while the Techalloy constituents are VOCs; the problem at the well consists of something else. Alternative potential sources may be the source of the observed contamination. The PRC report does not indicate sampling methods. The QAPP, at page 2-46, now avoids the use of the term "inconsistent."

Mr. Joseph M. Boyle
U.S. EPA

-9-

23 March 1994

COMMENT: Specify objectives and dependent decisions. (2.4.1.a.)

RESPONSE: The QAPP now describes objectives in detail, beginning at page 2-47.

COMMENT: Describe the statistical evaluation in greater detail (2.4.1.b.)

RESPONSE: The QAPP text, at page 2-48, now contains a reference to an introductory statistics book.

COMMENT: Expand the description of purposes to describe compounds, trigger levels, locations, numbers of samples. (2.4.1.c.I.)

RESPONSE: The statement of purpose ordinarily discusses just the purpose of the work. Methods are usually discussed elsewhere, since methods do not define the work's purpose. WESTON requests that U.S. EPA accept this traditional arrangement, as it provides a clear and logical arrangement of the plans. The QAPP, at page 2-47 et seq., now provides much greater detail in the purpose section, in response to U.S. EPA's request. The details of implementation, however, are reserved for later discussions of methods.

COMMENT: Expand the description of purposes to explain what constitutes "sufficient information." (2.4.1.c.I.3.)

RESPONSE: The QAPP text, at page 2-47 et seq., now describes what constitutes sufficient information.

COMMENT: Explain what specific decisions each result supports. (2.4.1.c.I.4.)

RESPONSE: The DQO table establishes the relationship between decisions and results.

COMMENT: Expand the description of purposes to describe how results will be incorporated into the CMS. (2.4.1.c.I.5.)

RESPONSE: The QAPP, at page 2-47 et seq., now describes how results will be incorporated into the CMS.

COMMENT: Expand the description of purposes to describe incorporation of the results of Phase I into Phase II. (2.4.1.c.6.)

RESPONSE: The QAPP now describes incorporation of the results of Phase I into Phase II.

Mr. Joseph M. Boyle
U.S. EPA

-10-

23 March 1994

COMMENT: For each activity that generates data, identify the use of that data. (2.4.2.a.)

RESPONSE: The DQO table, Table 2-14, already identifies the use for all data.

COMMENT: Identify Project Target Parameters based on legal agreements and activities at the facility. (2.4.2.b.I. and 2.4.2.b.II.)

RESPONSE: The QAPP, at Tables 2-12.1 through 2-12.3 now identifies Project Target Parameters based on IEPA's cleanup objectives. Asterisks mark such parameters. Additional parameters are provided as a conservative measure to assure that other, unexpected compounds do not inadvertently escape detection.

COMMENT: State that the Project Target Parameters are the compounds that may be found at the facility. (2.4.2.b.III.)

RESPONSE: The QAPP now states that the Project Target Parameters include even more than the compounds expected at the facility.

COMMENT: Specify SVOCs to be analyzed. (2.4.2.c.)

RESPONSE: A new table, Table 2-12.2, identifies the SVOCs. The action limits, as previously agreed upon in the pre-QAPP meeting of 23 March 1993, are defined as the CRQLs. The SAP lists the CRQLs for every compound.

COMMENT: Identify the number and location of the background samples. Define how the background samples will be used. (2.4.2.d.)

RESPONSE: The QAPP text, at page 2-49, explains that the FSP identifies the number and location of the background samples.

COMMENT: Identify project target limits for field parameters. (2.4.2.1)

RESPONSE: The QAPP, at page 2-49, explains that field parameters are only for health and safety and determining when to sample after purging. Furthermore, the QAPP, at Section 4.2, specifies the accuracy of field equipment. As a result, project target limits are not needed for them.

COMMENT: Identify project target limits for laboratory parameters. (2.4.2.2)

Mr. Joseph M. Boyle
U.S. EPA

-11-

23 March 1994

RESPONSE: At the pre-QAPP meeting, U.S. EPA agreed that CRQLs would serve as the the project target limits.

COMMENT: Specify data quality objectives for each step of the project. (2.4.3)

RESPONSE: The DQO table, Table 2-14, specifies data quality objectives.

COMMENT: Identify what BG-5 contains. (2.5.1.a.I.)

RESPONSE: The QAPP explains that BG-5 contains aliphatic hydrocarbons.

COMMENT: Explain whether the BG-5 has been analyzed. (2.5.1.a.I.)

RESPONSE: The QAPP makes clear that the BG-5 area has not been analyzed.

COMMENT: State whether samples will be oily. (2.5.1.a.I.)

RESPONSE: The QAPP states that the samples will be oily.

COMMENT: Describe what consideration will be exercised for the samples. (2.5.1.a.I.)

RESPONSE: The HASP describes the consideration that will be exercised for all samples.

COMMENT: Describe why the various SWMUs require unique numbers of samples. (2.5.1.a.II.)

RESPONSE: The QAPP now explains that large SWMUs require more samples than small ones.

COMMENT: Describe whether the number of samples comports with the statistical method. (2.5.1.a.III.)

RESPONSE: The t-statistic works best with more than about five data points. Additional samples are helpful. The FSP provides at least six.

COMMENT: Describe why soils are not to be analyzed for SVOCs. (2.5.1.b.)

RESPONSE: In response to U.S. EPA's new concern, the QAPP now provides analyses for SVOCs. However, these new analyses are contrary to the agreement reached during the

Mr. Joseph M. Boyle
U.S. EPA

-12-

23 March 1994

pre-QAPP meeting of 23 March 1993. At that time, U.S. EPA had agreed to limiting SVOC analyses to just groundwater. (2.5.1.b.)

COMMENT: Describe why TPH is not analyzed, even when it was detected before. (2.5.1.c.)

RESPONSE: The QAPP specifies analyses capable of distinguishing individual petroleum constituents, such as benzene, toluene, ethylbenzene, an xylene. Such measurements are more direct than TPH, which reduces information about many compounds to a single number.

COMMENT: Use a slow-flow pump for purging and sampling. (3.1.a.I.)

RESPONSE: In response to U.S. EPA's new concern, the FSP, at pages 3-6 and 3-7, now provides a slow-flow peristaltic pump for purging and sampling at soil probe locations. However, the new means of withdrawing samples is contrary to the method U.S. EPA requested during the pre-QAPP meeting of 23 March 1993. During the pre-QAPP meeting, U.S. EPA specifically asked for a bottom-delivery bailer.

COMMENT: Collect groundwater samples after field readings stabilize. (3.1.a.II.)

RESPONSE: The FSP, at page 3-6, now specifies that readings must stabilize before data can be collected.

COMMENT: Analyze both filtered and unfiltered metals. (3.1.a.III.)

RESPONSE: The basis for this comment is unclear. The FSP has always specified analyzing both filtered and unfiltered metals. The FSP continues to do so.

COMMENT: Use better sampling procedures to minimize exposure to the atmosphere. (3.1.b.)

RESPONSE: The reviewer has not provided any suggestions for a better procedure, so it is unclear what would be better. If, for instance, brass sleeves were used within the split spoons, several areas within the spoons would be inaccessible. The QAPP's existing procedures call for collecting samples immediately upon the spoon's opening. Rapid collection minimizes atmospheric exposure.

COMMENT: Use a trip blank for both water and soil. (3.1.c.)

Mr. Joseph M. Boyle
U.S. EPA

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23 March 1994

RESPONSE: Originally the FSP only called for water trip blanks for each shipping container of water. The FSP, at page 4-3, now also specifies water trip blanks for each shipping container of soil.

COMMENT: Expect a comparison of laboratory SOPs against project objectives. (4.1 and 4.2.1 -- gap in outline exists in original.)

RESPONSE: U.S. EPA agreed to the use of CLP-type SOPs at the pre-QAPP meeting of 23 March 1993. No additional evaluation is warranted. WESTON trusts that the SOPs will be acceptable as agreed.

COMMENT: Provide reports on the progress of the work and the satisfaction of DQOs. (5.1.)

RESPONSE: The QAPP now includes progress reports on the work and DQOs.

If you have any questions, feel free to call WESTON. Again, we look forward to conducting field work this summer.

Very truly yours,

ROY F. WESTON, INC.



Carlos J. Serna, P.G.
Senior Project Manager

cc: Bill Buller, U.S. EPA
Henry Lopes, Techalloy
Rick Perlick, Techalloy



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAR 01 1994

REPLY TO THE ATTENTION OF:

Mr. Henry Lopes
Techalloy Company, Inc.
370 Franklin Turnpike
Mahway, New Jersey 07430

HRE-8J

Re: RFI Report
Techalloy Company, Inc.
ILD 005 178 975

Dear Mr. Lopes:

A request by Weston in your behalf for an extension of time to submit a revised RCRA Facility Investigation (RFI) Workplan is hereby granted. The revised Workplan shall be submitted by March 24, 1994.

If you have any questions concerning this matter please call William Buller at (312) 886-4568.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin M. Pierard".

Kevin M. Pierard, Chief
Technical Enforcement Section #1

cc: Carlos Serna, Weston



Printed on Recycled Paper

MAR 01 1994

Mr. Henry Lopes
Techalloy Company, Inc.
370 Franklin Turnpike
Mahway, New Jersey 07430

HRE-8J

Re: RFI Report
Techalloy Company, Inc.
ILD 005 178 975

Dear Mr. Lopes:

A request by Weston in your behalf for an extension of time to submit a revised RCRA Facility Investigation (RFI) Workplan is hereby granted. The revised Workplan shall be submitted by March 24, 1994.

If you have any questions concerning this matter please call William Buller at (312) 886-4568.

Sincerely,

ORIGINAL SIGNED BY
KEVIN M. PIERARD
Kevin M. Pierard, Chief
Technical Enforcement Section #1

cc: Carlos Serna, Weston

bcc: J. Kline, ORC
HRE-8J\WBuller\ab\6-4568\f:...tes.#1\LOPES.LTR\February 25, 1994

OFFICIAL FILE COPY

CONCURRENCE REQUESTED FROM REB			
SEC/BR SECRTRY	REB STAFF	REB SECTION CHIEF	REB BRANCH CHIEF
HB 2/25/94	MB 2/28/94	JA 2-28-94	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

121

FEB 08 1994

REPLY TO THE ATTENTION OF:

HRE-8J

Mr. Henry Lopes
Techalloy Company, Inc.
370 Franklin Turnpike
Mahwah, New Jersey 07430

RCRA Facility Investigation
Techalloy Company, Inc.
ILD 005 178 975

Dear Mr. Lopes:

The United States Environmental Protection Agency (U.S. EPA) has reviewed the document "RCRA Facility Investigation (RFI) Draft Work Plan - Techalloy Company, Inc. Union, Illinois" April 1993, and the attached Quality Assurance Project Plan (QAPP). These documents were submitted in accordance with section VI.B. of the Administrative Order On Consent (AOC) Docket No. W-W-007-93.

U.S. EPA disapproves the above referenced document and recommends the documents be revised as noted in Attachment I (comments on RFI Work Plan) and Attachment II (comments on QAPP). Only corrected pages should be submitted to U.S. EPA with the revision date noted on each page.

For your information the Endangered Species coordinator at the Fish and Wildlife Chicago Field Office is Amelia Orton-Palmer. Her telephone number is (708) 381-2253. If you have any questions concerning the ecological assessment, please call Diane Sharrow of my staff at (312) 886-6199, and for questions concerning other matters call William Buller of my staff at (312) 886-4568.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Joseph M. Boyle".

Joseph M. Boyle, Chief
RCRA Enforcement Branch

cc: Kevin Lesko (IEPA)
Carlos Sernas (Weston)

J. Kline (ORC)

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AA 2/7/94

SIGNATURE/INITIAL CONCURRENCE REQUESTED - RCRA ENFORCEMENT BRANCH (REB)									
TYP.	AUTH	IL/IN TES CHIEF	MI/WI TES CHIEF	MN/OH TES CHIEF	IL/MI/WI EPS CHIEF	IN/MN/OH EPS CHIEF	REB BRANCH CHIEF	RCRA ASSOC. DIR.	WMD DIV. DIR.
and 2/6/94	MP 2/2/94	mjs for ss. 2/2/94					FMB 2/7/94		

ATTACHMENT I
Recommended Revisions to RFI Work Plan

Section 1.0 PURPOSE This paragraph should also quote or reference Section VI.C and the purpose statement of Attachment I of the AOC.

Section 2.0, page 2-47, - Delete sentence pertaining to Southern California Chemical.

Section 2.5.1. - This section refers to metals and inorganic analyses of soil sample SB-05. These results could not be identified and should be provided. The statement "concentrations of inorganics are of little concern" should be justified or deleted.

2.5.3 - This section notes the inorganic constituents in a Union well 3 sample and the volatile organic compounds (VOC)s in the plume emanating from the Techalloy facility, and states that "these constituents are inconsistent". Inorganic analytical groundwater data has not been provided to support this statement.

Section 5.2.1. - Soil samples shall also be analyzed for semi-volatile organic compounds (SVOCs), or provide rationale for not analyzing for these compounds.

5.2.4. The RFI should identify all actual and potential receptors.

Section 5.2.1. (Table 5-3) Based upon the past usage of the spent acid holding pond, analyses should include nitrate, chloride, sulfate, calcium, sodium, potassium, and ammonium.

Monitoring wells MW-7 and MW-5 should also be analyzed for these constituents. Table 5-3 should specify the specific metal analyses to be performed.

A representative ground-water sample shall be collected near the probe sample SW-21 of figure 3-4 and analyzed for VOCs.

Provide cross-sections (transverse to plume mainly) showing water levels, contaminant concentrations, lithology, and depth intervals of probe and auger samples. If this data does not assure representative samples of the contaminant plume were collected, additional ground-water samples should be proposed at appropriate depth intervals and locations.

Provide an illustration similar to figure 3-4 which delineates plume based on total VOC concentrations.

Revise figure 5-3 to show time frames in weeks without specific dates. Time frame to submit draft RFI report after U.S. EPA approval of RFI Workplan shall be specified to be 360 days. Revise Section 5.5 accordingly.

Rather than implementing RFI Phase II under a separate Work Plan, Phase II shall be implemented after Phase I results have been evaluated. Phase II shall include any additional data collection to fill any data gaps as identified by Phase I results. The Phase II results shall be included in the RFI draft report.

Ecological Assessment

Identify and describe the habitat possibly affected by contaminants from the facility. Specify if there are any old-field or edge habitats and if the holding pond has been utilized by birds.

Describe methods for a qualitative assessment (e.g. reconnaissance survey) of plants and animals at or near the facility. Include a written confirmation from the U.S. Fish and Wildlife Service, Chicago Metro Field Office, that the following Federally listed or proposed threatened or endangered species are not present at or near the facility: Bald Eagle; Indiana Bat; and Prairie Bush Clover. The assessment should identify any known or observed adverse effects (stressed vegetation, bird carcasses, or other obvious impacts) by site contaminants to biota. State whether or no any adverse effects have been noted by employees or other observers.

Describe methods to evaluate potential impacts of contaminants on plants and animals. These methods should include analysis of available data, fate and transport analysis, toxicity criteria, and standards for all contaminants of concern.

Section 7.2.3 - Delete, specifies U.S. EPA responsibilities not stated in the AOC.

ATTACHMENT II

QAS comments on Techalloy Inc., Union, IL

1.0 TITLE AND APPROVAL PAGE

- a. Change the name for the Regional Quality Assurance Manager to Willie Harris.
- b. The laboratory QA Manager should be added.

2.0 PROJECT DESCRIPTION

2.1 INTRODUCTION

2.1.1 OVERALL PROJECT OBJECTIVES

This section is missing, please provide specific information.

2.1.2 PROJECT STATUS/PHASE

This section is missing, please provide specific information.

2.2 SITE/FACILITY HISTORY

2.2.1 PAST DATA COLLECTION ACTIVITIES

- a. Provide the specific analytical methods that were used, with compounds and detection limits, for all analysis.
- b. Specify the sampling technique used to collect the historical data.
- c. Summarize the results of past activities we are not familiar with these investigations and the approach that was used.
- d. Explain why only dissolved metals were used to trace the metals mobility.
- e. What are the limitations of the "Groundwater probe-headspace" technique? Provide specifics on the capability.
- f. Table 2-8 page 2-24/56, what does "on-site off-site objective" mean, please explain.
- g. Section 2 page 40, explain why TCLP metals were used to characterize the soil?

QAS comments on Techalloy Inc., Union, IL

- h. Figure 2-10 page 33, we can not locate TT3 and TT4, please provide direction.
- i. Section 2 page 40, Drum Storage area:
 - I. What is the status of these drums, i.e., are they leaking, how big are they, what was stored in them, have they been characterized?
 - II. It was not clear what work has been done on this area that made the contractor conclude that only volatile compounds and metals were found. Please explain if chemical analysis was performed and if so what analytical methods were used.

2.3.3 CURRENT STATUS

- a. Summarize what is the current status?
- b. Had a geological model been drawn for the plume location? If one has been done please provide, if not we recommend preparing and providing one for this phase.
- c. Section 2 page 38, in the discussion of the "source areas", explain how could the contractor come to conclusion about the contamination distribution if "the precise spatial distribution are not known"?
- d. Table 2-11 page 41, the previous three closure SWMUs, why there were no volatile or other organic compounds?
- e. Tables 2-12 page 42-44, the five SWMUs:
 - I. Confirmatory samples must be taken and analyzed for specific Project Target Limits (using the right analytical methods) to establish what are the contaminant at Techalloy.
 - II. What sampling technique used to determine the migration pathways?
 - III. Provide the number of samples, locations and analytical methods used to determine the conclusion for the chemical

QAS comments on Techalloy Inc., Union, IL

- IV. If bailers used and only filtered samples were analyzed the migration pathways for metals is questionable. Provide specifics on what has been done.
- V. Section 2 page 45&46 potential receptors:
 - 1. Is there a model that will support the conclusion? Provide information.
 - 2. What were the sampling and analysis used by PRC consultant and Techalloy? The information may be used to answer the inconsistency in the results.

2.4 PROJECT OBJECTIVES

2.4.1 SPECIFIC OBJECTIVES AND ASSOCIATED TASKS

- a. Specify the objectives for each task and define what decision will be made on each results.
- b. Section 2 page 48, the use of evaluation and statistics is very good idea. But it is not clear how that will be done for Techalloy Facility, please specify. We encourage the contractor to depend on the False Positives and Negatives in deciding the number of samples for each decision they need to make.
- c. Section 2.3 page 46, the purpose of the RFI as stated should be expended. The following is an example on one purpose. We recommend that this to be followed for the reset.
 - I. Purpose number 1: "gather sufficient information to determine the vertical and horizontal extent and magnitude of constituents in the five SWMUs".
 - 1. What compounds, at what levels and for which matrix will trigger each decision.
 - 2. Location and number of samples needed to make a decision on both

QAS comments on Techalloy Inc., Union, IL

the vertical and horizontal.

3. Specify what will satisfy the "sufficient information" at this stage of the project. This is the time and place to include the different possibilities. One cannot change as the implementation in process.
4. What are the specific decisions that have to be made for each results collected.
5. Specifically how the results will be incorporated in the Corrective Measures Study.
6. How does the results of Phase I will incorporated in Phase II.

2.4.2 PROJECT TARGET PARAMETERS AND INTENDED DATA USAGES

- a. The intended data use must be specified for each data generations activities.
- b. The Project Target Parameters and their limits for each matrix must be listed here. This list must not be referenced to SOP, CLP or SW846 analytical methods. Techalloy must come up with this list based on:
 - I. Any legal agreement that has been signed with Federal or State agencies. This could be the same as the "State Cleanup objectives for Techalloy, Inc. October 7, 1991" or any others.
 - II. Information based on the activities at the Techalloy facility, chemical processes and the raw materials used.
 - III. Techalloy has to state that based on their information this is the compounds list out of Appendix 9 that may be found on the facility.
- c. Section 2 page 48, specify the semivolatile compound that will be analyzed with the

QAS comments on Techalloy Inc., Union, IL

action limits for each matrix.

- d. Section 2 page 49, provide the number and location with specific definition of how the background samples will used.

2.4.2.1 FIELD PARAMETERS

If there are any chemical parameters, provide specific project target limits for each matrix.

2.4.2.2 LABORATORY PARAMETERS

- a. See comment 2.4.2 above.

2.4.3 DATA QUALITY OBJECTIVES (DQO)

Specify the objectives for each step of this project with the associated decision that will be made for the results. These DQOs should be specifics and measurable, i.e., the DQOs degree of satisfaction could be assessed and reported as the project progress.

2.5 SAMPLE NETWORK DESIGN AND RATIONALE

2.5.1 SAMPLE NETWORK BY TASK AND MATRIX

- a. Table 2-13 page 50:

- I. Is information available about what does the Oil contain in Area BG-5? Was any Oil analysis for BG-5 Area done? Is soil samples will have some Oil? What consideration will be exercised for those samples?
- II. What is the rational for using different number of samples for each Area?
- III. Is the number of samples for each units was considered in term of the statistical test that was proposed?

- b. What is the rational to analyze for semivolatile in ground water and not in the soils where one might expect to find them?

QAS comments on Techalloy Inc., Union, IL

- c. What is the rationale for not analyzing for Total Petroleum Hydrocarbon specially when it was detected before?

3. SAMPLING PROCEDURES

3.1 Field QC Sample Collection/Preparation Procedures

- a. Section 3.2 page 6:
 - I. Recommend the use of slow flow rate pump for both purging and sampling ground water.
 - II. Recommend the sampling be done after the Turbidity, Dissolved Oxygen and Redox has been stabilized.
 - III. The ground water samples for metals should be analyzed for both filtered and unfiltered samples.
- b. Section 3.6 page 14, recommend the use of better sampling procedures, the new procedure should minimize the atmospheric exposure of soil sample both during sampling, containerized and transportation.
- c. Section 4.4 page 3, recommend the use of Trip blank for each shipment of samples that will be analyzed for volatile organic compound both water and soil.

4.0 ANALYTICAL AND MEASUREMENT PROCEDURES

4.1 Laboratory Analytical & Measurement Procedures

When the Project Target Limits has been submitted (see comment 2.4.2 above) the laboratory SOPs will be evaluated to see if it could achieve the Project objectives.

4.2.1 List of Project Target Compounds & Detection Limits

Each SOP must have all the compounds of interest at the level needed.

5.0 QUALITY ASSURANCE REPORTS TO MANAGEMENT

5.1 Contents of Project QA Reports

QAS comments on Techalloy Inc., Union, IL

Recommend including the Data Quality Assessment as an item to report on, i.e., what are the progress and how far are the Data Quality Objectives been satisfied.



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/524-3300

January 18, 1994

Mr. Bill Buller
United States Environmental Protection Agency
Region V
RCRA Enforcement Branch, (HRE-8J)
77 West Jackson Boulevard
Chicago, IL 60604

RECEIVED

JAN 20 1994

OFFICE OF RCRA
WASTE MANAGEMENT
EPA, REGION V

RE: 1110900003 -- McHenry County
Techalloy, Inc./Union
ILD005178975
RCRA Closure

Dear Mr. Buller:

The Illinois Environmental Protection Agency (IEPA) would like to provide the following comments on the RCRA Facility Investigation Draft Work Plan. This work plan was required by the Administrative Order of Consent issued to Techalloy (TA) by USEPA, and submitted by Weston on behalf of TA. The work plan was dated April, 1993 and received by the IEPA on April 27, 1993.

1. In Section 2.5.1 of the work plan TA indicates that a soil sample (SB-05) was taken from the Spent Acid Holding Pond and analyzed for inorganics (specific inorganics not identified), TPH, and metals. TA states that the laboratory results indicates that the soil concentrations of metals and inorganics appear to be of little concern. The analytical results for this sample could not be located. The inorganic analytical constituents are not identified, nor is the basis for the comment that the concentrations of metals and inorganics are not of concern. **TA has not provided any justification regarding the demonstration that the parameters in question are of little concern.**
2. In Section 2.5.3 TA indicates that, "The constituents are inconsistent because inorganics were observed at the well [Union Well No.3], while the plume emanating from Techalloy consist of VOCs." The IEPA is not aware of the collection of any groundwater data in the area of the TA facility to demonstrate that an inorganic plume is not emanating from the facility. **To date the IEPA has not been provided with any data on inorganics in the groundwater at the TA facility.**
3. Section 5.2.1 Indicates that the soil and groundwater samples to be collected will be analyzed for those constituents potentially associated with the SWMU being

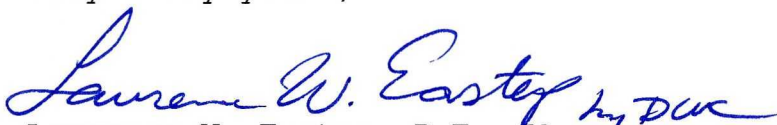
investigated. Table 5-3 indicates that the Spent Acid Holding Pond will be analyzed for VOCs and metals only. In 1987 Union's Public Water Supply (PWS) Well # 3 was taken out of service due to excessive levels of Ammonia, Chlorides, Sulfate, Sodium, and Potassium. One of the suspected sources of this contamination is TA's Spent Acid Holding Pond. Techalloy's Certification Regarding Potential Release from Solid Waste Management Units (Attachment 1), identified the Spent Acid Holding Pond as being operated as follows:

From the early 1960's until approximately 1980 Techalloy treated their spent pickle liquor by neutralizing it with ammonia, then filtering it through a limestone filled inground steel lined holding bed. The liquid then traveled through a drainage tile to an unlined dry-bed pond (i.e. a surface impoundment) for evaporation. The spent pickle liquor consist of dilute hydrofluoric, sulfuric, muriatic, and nitric acids. The drainage tile was closed off in 1969 or 1970, but the limestone bed was utilized along with a clarifier until 1980.

Based upon the operation of this unit it is likely that the unit has imparted contaminants to the groundwater. **The inorganic parameters nitrate, chloride, sulfate, sodium, and potassium should be included in the analysis of the samples associated with this SWMU.**

Should you have any questions regarding this matter, please contact Kevin D. Lesko at 217/524-3271.

Very truly yours,



Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control
Bureau of Land

^{KL}
LWE:KL:kl\ta\3008(h)\rfi-wp.use
_{JK}

Attachment

ATTACHMENT 1

CERTIFICATION REGARDING POTENTIAL RELEASES FROM SOLID WASTE MANAGEMENT UNITS

FACILITY NAME: Techalloy Illinois, Inc.

EPA I.D. NUMBER: ILD005178975

LOCATION CITY: Olsen and Jefferson Roads, Union

STATE: Illinois

1. Are there any of the following solid waste management units (existing or closed) at your facility? NOTE - DO NOT INCLUDE HAZARDOUS WASTE UNITS CURRENTLY SHOWN IN YOUR PART A APPLICATION

	YES	NO
• Landfill	<u> </u>	<u>X</u>
• Surface Impoundment	<u> </u>	<u>X</u>
• Land Farm	<u> </u>	<u>X</u>
• Waste Pile	<u> </u>	<u>X</u>
• Incinerator	<u> </u>	<u>X</u>
• Storage Tank (Above Ground)	<u> </u>	<u>X</u>
• Storage Tank (Underground)	<u> </u>	<u>X</u>
• Container Storage Area	<u>X</u>	<u> </u>
• Injection Wells	<u> </u>	<u>X</u>
• Wastewater Treatment Units	<u> </u>	<u>X</u>
• Transfer Stations	<u> </u>	<u>X</u>
• Waste Recycling Operations	<u> </u>	<u>X</u>
• Waste Treatment, Detoxification	<u>X</u>	<u> </u>
• Other <u> </u>	<u> </u>	<u> </u>

2. If there are "Yes" answers to any of the items in Number 1 above, please provide a description of the wastes that were stored, treated or disposed of in each unit. In particular, please focus on whether or not the wastes would be considered as hazardous wastes or hazardous constituents under RCRA. Also include any available data on quantities or volume of wastes disposed of and the dates of disposal. Please also provide a description of each unit and include capacity, dimensions and location at facility. Provide a site plan if available.

(See attached sheet.)

NOTE: Hazardous wastes are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII of 40 CFR Part 261.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

DATE: September 10, 1993

SUBJECT: Review of RFI Draft Work Plan
Techalloy Company, Inc.
Union, IL

FROM: Diane Sharrow
Environmental Scientist
MI/WI TES, REB

TO: Bill Buller
Corrective Action Project Manager
IL/IN TES, REB

I have reviewed the Draft RFI Work Plan and have the following comments:

1. The facility did not identify nor propose to identify and/or describe the habitat adjacent to or possibly affected by contaminants from the facility. The designation of the surrounding area as agricultural is not sufficient. For example, is there any old-field or edge habitat? Has the holding pond been utilized by birds?

A qualitative assessment of plants and animals at or near the facility should also be provided. A description of the qualitative assessment (e.g., reconnaissance survey) should be provided. This assessment must include a written confirmation from the USF&WS Chicago Metro Filed Office that the following Federally listed or proposed threatened or endangered species are not present at or near the facility; the bald eagle, the indiana bat and the prairie bush clover. The Endangered Species Coordinator in the Chicago Metro/Barrington Office is Amelia Orton-Palmer. She can be reached at (708)381-2253.

2. The facility did not identify any known or observed adverse effects of site contaminants to biota, such as stressed vegetation, bird carcass, etc., or other obvious impacts. The facility should state whether it has ever noted any adverse effects and whether they have sought information regarding adverse effects, e.g., knowledgeable employees, or as part of a qualitative assessment suggested above.

3. The facility should address how it intends to evaluate potential impacts of the contaminants on plants and animals. If the facility believes based on prior sampling and fate and transport analysis that there are no potential impacts, it should provide an written assessment based on this existing information and on available toxicity criteria and standards for the contaminants of concern (metals, VOCs, etc.), and then propose no further action.

If you have any questions, please contact me at 886-6199.

cc: Lodisio

Rechalloy Company, Inc. Union, IL

April 93

RCHA FI Draft Work Plan

Olson & Jefferson Rd Intersection, McHenry Co.
5 acres developed 29 acres of ague
surrounding

Mephls (Dissolvea)
Chlorinated Hydrocarbons
VOCs.

Sec: 2 Identification of Receptors

{ Bald Eagle
Indiana Bat
Prairie Bush Clover

Soils as a pathway
for ^{uptake} ingestion



THREE HAWTHORN PARKWAY, SUITE 400
VERNON HILLS, IL 60061-1450
708-918-4000 • FAX: 708-918-4055

RECEIVED
MAY 17 1993

14 May 1993

OFFICE OF RCRA
WASTE MANAGEMENT
EPA REGION

Mr. William Buller
U.S. Environmental Protection Agency
Region V
RCRA Enforcement Branch (HRE-8J)
77 West Jackson
Chicago, IL 60604

Re: Private Well Sampling Plan (PWSP)
Techalloy Company, Inc.
ILD 005 178 975


Dear Mr. Buller:

Per your request, Roy F. Weston, Inc. (WESTON®) has prepared signature pages to be incorporated into the Draft RFI planning documents for Techalloy Company, Inc. located in Union, Illinois. Enclosed please find three sets of signature pages, one for each set of documents submitted.

If you require any additional information please do not hesitate to contact WESTON at (708) 918-4000.

Very truly yours,

ROY F. WESTON, INC.


Carlos J. Serna, P.G.
Senior Project Manager

CJS:sk

Enclosure

cc: Kevin Lesko - IEPA

